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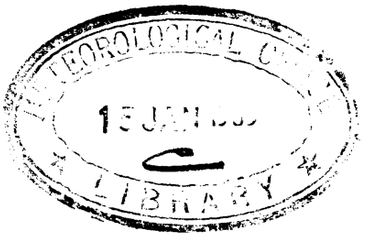

THE OBSERVATORIES' YEAR BOOK

1942

Comprising the meteorological and geophysical results obtained from autographic records and eye observations at the Lerwick, Aberdeen, Eskdalemuir, and Kew Observatories

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PREFACE

The *Observatories' Year Book* was published for the years 1922 to 1937 in continuation of Part III Section II and Part IV of the *British Meteorological and Magnetic Year Book* for the period 1908 to 1921.

Publication of the *Observatories' Year Book* was necessarily suspended during the 1939–45 war. Restrictions on supplies and printing since the war resulted in a regrettably long delay in the resumption of publication. In face of the formidable accumulation of arrears, and taking changed requirements into account, it was decided to adopt an abridged form as outlined below.

It was agreed that the **General Introduction** to the Meteorological Tables and the parts of the sectional Introductions which deal with site, instruments, procedure and tabulation included in the volume for 1938 should serve as standards of reference for several years; and that only important departures from these standards, together with any requisite additional information, should be included in the relevant parts of the volume for the years after 1938. The space devoted to the discussion of observations was reduced. Monthly tables of individual hourly values of meteorological elements were discontinued, but summaries of daily mean values (or totals), monthly means (or totals) of hourly values and some maximum and minimum values are given. The diary of cloud, weather and visibility was also discontinued. No major changes were made in the atmospheric electrical and magnetic tables. The aerological and seismological tables were discontinued after 1939.

The present volume, 1942, presents atmospheric electrical and geomagnetic data for Lerwick Observatory; meteorological data for Aberdeen; meteorological, atmospheric electrical and geomagnetic data for Eskdalemuir; meteorological, atmospheric electrical and atmospheric pollution data for Kew.

Meteorological and geomagnetic data for Valentia Observatory are no longer included in the *Observatories' Year Book*, but are published by the Dublin Department of Industry and Commerce Meteorological Service.

Manuscript tabulations of hourly values of the meteorological elements are available at the observatories. Requests for information from these tabulations should be addressed to the Director-General, Meteorological Office, Air Ministry, Victory House, Kingsway, London, W.C.2.

NOTES ON THE TABLES: Maximum and minimum values are shown in italics.

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LERWICK

LERWICK OBSERVATORY

Latitude	60°08′N.
Longitude	1°11′W.
G.M.T. of Local Mean Noon	12h. 5m.
Height of site above M.S.L.	80 to 90 metres

INTRODUCTION

Full details of the site, instruments, procedure and tabulation are given in the *Observatories' Year Book* for 1938. Changes and additions only are mentioned here.

ATMOSPHERIC ELECTRICITY

No changes were made in 1942.

TERRESTRIAL MAGNETISM

The average day-to-day change of temperature in the magnetograph house for each of the 12 months of 1942 and for the year as a whole was as follows (in degrees Absolute):-

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
0·37	0·29	0·35	0·42	0·44	0·41	0·33	0·31	0·30	0·30	0·56	0·37	0·37

There were 24 occasions on which the change reached or exceeded 1°A.

As already stated in the 1938 Year Book, a Smith portable coil magnetometer, which had been reconstructed to operate as a Schuster-Smith coil magnetometer, was brought into use and adopted as the standard instrument in October 1939. The volume for 1938 contains a statement on the corrections, arising from instrumental changes and comparisons, to be applied to the values of H, D and V published for the years 1923 to 1938. Corresponding corrections have not been applied to the individual values in the four tables for each month given in this volume (1942) but are shown in the tables and repeated below. The values of the elements given in Table 58 and elsewhere in the volume have been corrected.

Corrections

H	-6γ throughout
D	$-4{\cdot}2'$ throughout
V	varies from month to month as below

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
-10γ	-10γ	-8γ	-7γ	-4γ	-3γ	-1γ	0γ	-2γ	-3γ	-4γ	-5γ

NOTES ON THE RESULTS

The factor to change variations of D expressed in minutes to units of force (γ) perpendicular to the magnetic meridian is approximately 4·18.

Comparing the mean values for all days of 1942 with those for 1941 it is noted that H increased by 4γ; D (west) decreased by $8{\cdot}5'$ and V increased by 15γ. The ranges between the extreme values recorded during 1942 were H, 1709γ; D, $3°14{\cdot}4'$; and V, 1009γ.

At the assembly of the Association of Terrestrial Magnetism and Electricity at Washington, in September 1939, a new measure of magnetic disturbance the *K* index was agreed upon. Measurements of *K* are now given in this volume, replacing the former measure $(HR_H + VR_V)10^{-4}$, in accordance with the I.A.T.M.E. circular letter dated January 20, 1940.

The *K* index is fully described in Terrestrial Magnetism and Atmospheric Electricity*. Briefly, a figure is allotted, on a scale 0–9, to each 3-hr. interval. The figure is a measure of the range of magnetic force during that period, measured from a curved line which represents the normal quiet-day variation. The figures are first allotted from the H magnetogram, and then increased, if necessary, by inspection of the D and V curves, so that the most disturbed component determines the final figure.

The scale of ranges in γ corresponding to the figures 0–9 varies from observatory to observatory. The lower limit of each number for Lerwick is

K	0	1	2	3	4	5	6	7	8	9
Range in γ	0	10	20	40	80	140	240	400	650	1000

Table I has been slightly changed in form from previous years owing to the omission of $(HR_H + VR_V)10^{-4}$. *K* figures and their sums, have been given for each day in the main tables, but as it is considered that monthly means of *K* figures are not a good measure of activity, they are not included. Tables II, III, IV, and V follow the pattern of previous volumes.

TABLE I

	Magnetic character figures			Mean character figures	
	Number of				
	0 days	1 days	2 days	Lerwick	International
January	18	13	0	0·42	0·53
February	13	12	3	0·64	0·62
March	7	18	6	0·97	0·88
April	10	15	5	0·83	0·71
May	18	12	1	0·45	0·39
June	14	16	0	0·53	0·47
July	9	21	1	0·74	0·65
August	10	21	0	0·68	0·65
September	13	15	2	0·63	0·71
October	8	18	5	0·90	0·85
November	10	19	1	0·70	0·69
December	16	14	1	0·52	0·55
Year					
1942	146	194	25	0·67	0·64
1941	172	169	24	0·60	0·73
1940	178	162	26	0·59	0·72
1939	186	143	36	0·59	0·77
1938	180	133	52	0·65	0·76
1937	119	197	49	0·81	0·73
1936	133	206	27	0·71	0·65
1935	100	245	20	0·78	0·67
1934	168	173	24	0·61	0·56
1933	157	169	39	0·59	0·64
1932	97	230	39	0·84	0·71

* BARTELS, J., HECK, N.H. AND JOHNSTON, H.F: The three-hour-range index measuring geomagnetic activity. *Terr. Magn. atmos. Elect., Baltimore Ma.* **44**, 1939, p.411.

TABLE II - ABSOLUTE DAILY RANGE AND MEAN MONTHLY VALUES

	Mean absolute daily range						Mean daily range expressed as percentage of yearly mean					
	1942			Mean 1932-42			1942			Mean 1932-42		
	H	D	V	H	D	V	H	D	V	H	D	V
	γ	γ	γ	γ	γ	γ	%	%	%	%	%	%
January	53	82	67	94	96	96	38	74	52	65	92	80
February	124	101	109	110	106	114	88	91	84	76	102	95
March	238	163	201	196	138	165	169	147	155	136	133	137
April	250	145	203	206	123	160	177	131	156	143	118	133
May	108	82	85	181	103	129	77	74	65	126	99	107
June	95	78	80	135	88	100	67	70	62	94	84	83
July	139	90	121	153	90	107	99	81	93	106	86	89
August	118	96	110	151	98	108	84	86	85	105	94	90
September	142	106	153	159	114	138	101	96	118	111	110	115
October	229	168	193	160	119	141	162	151	148	111	114	117
November	111	120	132	93	92	99	79	108	102	65	88	82
December	90	98	110	85	87	88	64	88	85	59	84	73
Winter	95	100	105	96	95	100	67	90	81	67	91	83
Equinox	215	145	187	180	124	151	152	131	144	125	119	126
Summer	115	87	99	155	95	111	82	78	76	108	91	92
Year	141	111	130	144	104	120	..	..	..	..	..	..

"Winter" comprises the four months January, February, November, December; "Equinox" the months March, April, September, October; and "Summer" May to August.

TABLE III - FREQUENCY DISTRIBUTION OF ABSOLUTE DAILY RANGE

Range	Number of cases, 1942			Percentage distribution					
				H		D		V	
	H	D	V	1942	1932-42	1942	1932-42	1942	1932-42
γ				%	%	%	%	%	%
0 - 9	0	0	1	0·0	0·0	0·0	0·0	0·3	0·5
10 - 19	4	1	24	1·1	1·8	0·3	0·5	6·6	8·2
20 - 29	20	7	32	5·5	5·2	1·9	2·6	8·8	12·2
30 - 39	23	9	28	6·3	7·4	2·5	4·8	7·7	9·9
40 - 49	25	30	22	6·9	7·7	8·2	8·6	6·0	7·4
50 - 59	40	37	22	11·0	10·3	10·1	11·3	6·0	6·0
60 - 69	40	50	20	11·0	10·2	13·7	13·9	5·5	5·2
70 - 79	32	43	19	8·8	9·7	11·8	9·8	5·2	4·8
80 - 89	21	30	16	5·8	7·8	8·2	9·2	4·4	3·8
90 - 99	27	21	13	7·4	5·6	5·8	6·5	3·6	3·3
100 - 109	11	21	18	3·0	4·1	5·8	4·8	4·9	3·6
110 - 119	8	10	10	2·2	2·9	2·7	3·6	2·7	2·7
120 - 129	8	11	15	2·2	2·6	3·0	3·4	4·1	2·5
130 - 139	6	12	6	1·6	1·7	3·3	3·3	1·6	2·2
140 - 149	12	18	6	3·3	2·1	4·9	3·0	1·6	2·2
150 - 159	5	9	6	1·4	1·3	2·5	1·6	1·6	1·9
160 - 169	10	5	11	2·7	1·5	1·4	1·5	3·0	1·8
170 - 179	5	7	6	1·4	1·0	1·9	1·4	1·6	1·1
180 - 189	3	5	11	0·7	0·9	1·4	1·2	3·0	1·5
190 - 199	3	3	7	0·7	1·0	0·8	0·9	1·9	1·5
200 +	62	36	72	17·0	15·2	9·9	8·0	19·7	17·8
Days omitted	0	0	0	..	..	..	..	..	..

TABLE IV - AVERAGE RANGE OF DIURNAL INEQUALITY 1932-42
WITH 1942 AS A PERCENTAGE OF THIS

		All days			International quiet days			International disturbed days		
		V	H	D	V	H	D	V	H	D
		γ	γ	′	γ	γ	′	γ	γ	′
Year	1932-42	47·5	46·7	9·04	9·3	36·5	8·30	118·9	117·1	13·55
	1942(%)	122	92	96	105	89	96	104	87	98
Winter	1932-42	38·0	23·4	7·60	7·3	14·7	4·32	110·2	79·3	12·83
	1942(%)	110	86	115	112	74	98	98	95	114
Equinox	1932-42	60·0	54·3	10·60	11·6	41·4	9·25	150·3	167·2	18·61
	1942(%)	140	113	91	119	98	105	115	103	88
Summer	1932-42	47·6	69·7	12·38	15·6	55·8	12·14	124·3	140·3	14·59
	1942(%)	103	87	95	100	88	90	83	64	105

"Winter" comprises the four months January, February, November, December; "Equinox" the months March, April, September, October; and "Summer" May to August.

TABLE V - RATIO OF RANGE OF INEQUALITY AT LERWICK TO THAT AT ESKDALEMUIR 1942

Type of day	Element	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
q	D	1·17	1·12	1·00	1·06	1·09	1·16	1·21	1·15	1·08	1·04	1·32	1·15
d	D	1·23	1·35	1·53	1·29	1·24	1·24	1·35	1·13	1·10	1·18	1·22	1·24
q	H	0·85	1·09	1·12	1·14	1·29	1·35	1·10	1·16	1·05	0·95	0·84	0·95
d	H	0·93	6·48	2·42	3·22	1·57	1·41	1·74	1·64	1·25	5·33	2·05	2·21
q	V	1·48	0·81	1·10	0·70	0·77	0·69	0·87	0·82	1·42	1·79	2·35	1·58
d	V	1·88	1·77	1·82	1·57	1·95	1·76	1·91	2·03	2·36	1·54	1·97	2·38

Magnetic disturbances.- Particulars of the principal magnetic disturbances recorded at Lerwick during the year are given in Table VI. In the Eskdalemuir Section will be found a similar list which deals with the same disturbances as recorded at that Observatory. Within the limit of accuracy of measurement and registration "sudden commencements" appear to occur simultaneously at the two Observatories.

TABLE VI - PRINCIPAL MAGNETIC DISTURBANCES RECORDED AT LERWICK, 1942

No.	From	To	Horizontal force					Declination					Vertical force				
			Max.	Time	Min.	Time	Range	Max.	Time	Min.	Time	Range	Max.	Time	Min.	Time	Range
	d. h. m.	d. h.	γ	d. h. m.	γ	d. h. m.	γ	′	d. h. m.	′	d. h. m.	′	γ	d. h. m.	γ	d. h. m.	γ
1*	Feb. 23 13 27	Feb. 24 5	1038	23 16 56	-101	24 1 34	1139	104·4	23 21 13	11·3	23 22 8	93·1	1154	23 15 59	621	23 21 11	533
2*	Feb. 27 15 26	Mar. 1 3	732	28 16 44	-286	28 12 14		74·8	27 19 42	40·5	28 4 30	34·3	1139	28 17 7	795	28 0 0	344
3*	Mar. 1 7 25	Mar. 2 7	716	1 22 30	-448	2 1 54	1164	147·3	1 7 53	-42·7	1 9 33	190·0	1240	1 9 26	231	2 1 50	1009
4	Mar. 3 1	Mar. 4 7	644	3 16 15	218	3 8 13	426	74·0	3 2 26	27·3	3 17 5	46·7	1128	3 16 24	783	3 2 48	345
5*	Mar. 5 4 17	Mar. 6 7	885	5 18 25	20	5 19 50	865	104·9	5 18 51	12·2	5 20 30	92·7	1073	5 17 28	669	5 20 41	404
6	Mar. 7 7	Mar. 8 7	421	7 20 36	-128	8 2 50	549	64·0	7 14 50	23·6	8 2 49	40·4	942	7 17 0	550	8 3 20	392
7	Mar. 8 10	Mar. 9 7	568	8 18 50	-46	9 3 27	614	76·6	9 1 30	9·9	9 2 47	66·7	1064	8 18 50	464	9 3 23	600
8	Mar. 26 6	Mar. 26 24	445	26 16 19	301	26 10 52	144	76·6	26 14 53	43·6	26 8 50	33·0	964	26 14 26	840	27 4 29	124
9	Apr. 2 5	Apr. 4 24	1022	4 16 35	-349	4 20 15	1371	125·9	4 20 13	3·3	4 19 59	122·6	1096	4 16 33	585	4 20 8	511
10*	Apr. 8 1 15	Apr. 9 2	480	8 16 57	264	8 2 57	216	69·0	8 14 51	22·5	8 3 30	46·5	1018	8 17 20	719	8 2 38	299
11	Apr. 13 13	Apr. 14 19	496	13 15 43	-598	14 1 2	1094	75·2	14 2 25	-15·2	14 0 33	90·4	1013	13 17 43	311	14 2 11	702
12	Apr. 16 13	Apr. 19 6	545	18 14 4	-177	17 1 31	722	73·2	18 13 37	35·2	17 2 1	108·4	1032	18 15 59	505	17 2 0	527
13	Apr. 23 0	Apr. 24 22	506	23 17 8	224	24 0 57	282	70·5	24 0 42	38·6	23 19 15	31·9	1021	23 16 48	693	24 1 52	328
14	Apr. 27 10	Apr. 28 6	516	27 18 45	-209	28 1 56	725	67·0	27 17 40	-11·6	28 1 35	78·6	1005	27 18 44	482	28 1 45	523
15	May 4 12	May 5 8	518	4 18 23	-39	5 1 11	557	71·2	4 16 20	-10·2	5 1 39	81·4	1003	4 18 21	601	5 1 50	402
16	May 27 9	May 28 9	529	27 18 59	275	28 5 34	254	69·9	27 13 32	27·5	27 19 0	42·4	1007	27 17 42	751	27 23 10	256
17	June 11 0	June 12 5	550	11 16 17	279	12 0 54	271	71·3	11 16 11	38·8	11 23 38	32·5	1020	11 19 30	756	12 1 15	264
18	June 19 10	June 20 7	576	19 16 35	361	19 10 13	215	68·9	19 16 45	46·0	19 21 29	22·9	982	19 16 12	840	20 4 38	142
19	July 8 1	July 9 5	452	8 19 2	284	8 23 50	168	69·9	8 14 15	36·0	8 20 26	33·9	954	8 19 25	790	{8 23 57 / 9 0 2}	164
20*	July 10 23 35	July 12 7	824	11 15 20	225	11 6 15	599	77·2	11 15 28	27·9	11 1 50	49·3	1146	11 14 17	730	11 1 28	416
21	July 15 14	July 16 5	546	15 17 27	241	15 23 53	305	63·3	15 16 43	28·0	15 17 32	35·3	1015	15 17 27	744	16 0 39	271
22	Aug. 10 12	Aug. 11 1	533	10 18 52	347	10 13 21	186	66·2	10 15 23	27·6	10 19 7	38·6	1043	10 18 47	830	10 23 58	213
23	Aug. 15 18	Aug. 17 6	529	16 20 7	187	16 4 5	332	67·1	16 19 57	3·8	16 20 22	63·3	977	16 19 56	721	16 4 1	256
24	Aug. 18 6	Aug. 20 6	475	19 18 35	267	19 0 17	208	67·1	18 14 28	23·6	19 18 33	43·5	990	19 14 40	764	20 2 30	226
25	Aug. 22 21	Aug. 24 5	629	23 15 50	217	23 0 25	412	68·1	23 14 28	17·6	23 23 4	50·5	1072	23 15 46	680	23 1 33	392
26*	Sept. 11 11 37	Sept. 13 5	476	12 20 42	12	11 23 56	464	81·0	11 23 42	21·5	12 0 12	59·5	988	11 19 53	560	12 1 7	428
27	Sept. 14 12	Sept. 15 7	467	14 19 13	186	14 23 43	281	72·5	14 19 31	30·4	14 19 52	42·1	976	14 17 5	731	14 23 47	245
28	Sept. 17 9	Sept. 18 6	502	17 17 34	276	17 19 53	226	63·9	17 14 31	24·0	17 17 42	39·9	1044	17 17 35	732	17 22 28	312
29	Sept. 20 8	Sept. 22 8	485	21 18 29	221	21 2 18	264	63·0	21 5 4	27·5	21 18 29	35·5	990	21 16 48	746	20 23 18	244
30	Oct. 2 2 45	Oct. 3 8	1111	2 15 30	-4	3 4 11	1115	117·0	2 20 47	10·4	2 19 49	106·6	1115	2 15 25	576	3 4 15	539
31	Oct. 11 15	Oct. 14 3	470	11 20 25	260	13 1 39	210	63·6	12 12 28	5·6	13 17 30	58·0	1036	13 17 10	785	13 1 50	251
32	Oct. 28 11	Oct. 31 5	1092	28 15 53	-553	28 23 37	1645	137·3	28 18 17	-47·1	28 23 58	184·4	1153	28 16 22	617	29 21 27	536
33	Nov. 23 11	Nov. 27 1	476	26 19 56	-258	24 1 0	734	79·5	24 4 22	-7·1	23 22 53	86·6	1036	24 10 17	518	23 23 11	518
34	Dec. 9 13	Dec. 10 6	754	9 19 10	-22	9 23 43	776	75·4	9 19 13	-20·2	9 23 56	95·6	1122	9 19 4	532	10 0 15	590

Where the beginning of a disturbance has been marked by a "sudden commencement", the serial number is followed by an asterisk(*), and the time entered in the second column is that of the sudden commencement estimated to the nearest minute. In other cases, the exact hour nearest the time at which disturbance may be regarded as having begun is entered in the second column. To the tabulated values of maximum and minimum the following have to be added:— H, 14000γ; D, 11°; V, 46000γ.

REMARKS ON THE AUTOGRAPHIC RECORDS, 1942

The Lerwick mean character figure for the month is shown in brackets after the name of the month.

JANUARY (0·42).- This was a very quiet month with no "2" days and the lowest average character figure since August 1940.

After a calm beginning to the month, slight disturbance developed during the morning of the 2nd and continued with no marked features until late on the 7th. A small "sudden commencement" at 8d.23h.9m. brought a return of very mild activity, which was still in evidence when another "sudden commencement" (+85γ in H; -7·0′, +9·0′, -13·7′ in D; +32γ in V) at 18d.21h.17m. gave it increased vigour. Quiet conditions were re-established by the afternoon of the 19th and prevailed with only slight interruptions for the remainder of the month.

FEBRUARY (0·64).- Apart from some small irregular pulsations between 2d.2h. and 18h., the first four days were relatively quiet. Minor disturbances on the 5th and 6th were followed by another long quiet spell from the 8th until the 22nd. The first large storm of the year was heralded by a "sudden commencement" at 23d.13h.27m. (-8γ, +33γ in H; +3·5′ in D; +7γ in V). H formed a high peak from 15h.-20h. with a maximum of 15038γ at 15h.56m. V was also above normal during the initial period, while D was only slightly affected until it suddenly fell 57′ and then increased 70′ between 18h.55m. and 18h.59m. All the elements were subnormal after 21h., the

biggest departure from the usual value being a trough 400γ deep in H centred at 24d.1h.30m. By 4h. the storm had subsided, but sporadic minor outbursts occurred during the remainder of the month. The most interesting of these was a small bay in H at the unusual time of 12h.-13h. on the 28th, followed by moderate peaks in both H and V centred at 16h.45m.

MARCH (0·97).- This was a month of almost continuous minor disturbance, as is illustrated by the low number of "0" days (7), a record unequalled since April 1940.

The only severe storm began suddenly at 1d.7h.27m. (+60γ, -110γ in H; -15·5′, +33·0′ in D; +32γ, -58γ in V). The outstanding feature of the storm was a series of "giant pulsations" between 14h.30m. and 17h.30m. The average period of these was 4½ min. and the maximum amplitudes 125γ, 14′ and 35γ in H, D and V respectively. The largest movements in H and V occurred between 22h. and 2d.3h. when they formed deep bays, with minima of 13552γ in H at 1h.54m. and 46231γ in V at 1h.50m. D was also subnormal at this time, but had been more seriously affected in the initial stage of the storm, its maximum of 13° 27·3′ at 7h.53m. being followed by its minimum of 10° 17·3′ at 9h.33m. All the elements were recovering steadily by 2d.4h. and conditions were only slightly disturbed for the remainder of the 2nd. H and V formed moderate peaks on the afternoon of the 3rd, with smaller changes in D. A small "sudden commencement" at 5d.4h.18m. was followed by a short sharp disturbance between 16h. and 22h. H reached its maximum for the month, 14885γ at 18h.25m. and fell 865γ in the next 85 min. The ranges in D and V were less than half that in H.

Minor activity continued until 6d.16h. and was renewed again at 7d.7h. with small rapid oscillations. A sharp trough 500γ deep in H at 8d.3h. accompanied by similar but smaller movements in D and V was the next feature of note. Between 8d.18h.55m. and 19h.3m. H rose 106γ and fell 136γ in a needle-like peak and fell more gradually thereafter to a broad bay from 9d.1h. to 4h. V was likewise depressed at the same time, while D changed more irregularly through a range of 66·7′.

Moderately disturbed conditions with occasional quiet spells of a few hours duration prevailed for the rest of the month; the only movements large enough to be described as a storm were between 19d.15h. and 20d.6h. when a broad peak in V centred at 18h. was followed by bays in all the elements round about midnight.

APRIL (0·83).- The high level of magnetic activity featured in March, continued throughout April.

The relatively quiet conditions with which the month opened gave way on the 2nd to slight disturbance, which led up to a short but severe storm between 4d.15h. and 21h. H reached its maximum of the month at 16h.35m. and then fell 1371γ to its minimum at 20h.15m. Ranges in V and D were barely one third that in H. The storm subsided suddenly just before 21h. leaving the magnetic field as quiet as it had been on the 1st.

Minor activity from 8d.1h. to 21h. and from 10d.22h. to 11d.22h. interrupted this quiet spell and it was ended by a small "sudden commencement" at 13d.8h.31m. The ensuing disturbance did not reach storm proportions until after 21h. when H and V started to fall and formed deep bays, with maximum depths of 950γ and 550γ respectively. Recovery at about 14d.3h. was rapid and there were no movements greater than 100γ on the remainder of the 14th. There was another very similar but smaller storm on the night of the 16th-17th; this time D was more markedly affected and formed a series of troughs, with its minimum for the month at 17d.2h.1m. Minor disturbance after this storm was more pronounced and conditions did not become quiet again until the 20th.

Small rapid pulsations set in at 23d.5h. and gave way at 12h. to further mild disturbance. The period 24d.16h. to 27d.12h. was the quietest of the month. A small storm developed gradually during the afternoon of the 27th and reached its climax between 27d.23h. and 28d.3h. when all the elements formed moderate bays. The storm had subsided by 28d.6h. and there was nothing of note in the remainder of the month.

MAY (0·45).- With no large storms and only sporadic minor activity, May was much quieter than April and March.

There were only small variations from the usual diurnal variations until the 4th, when the only definite storm of the month began gradually during the afternoon. All the elements were subnormal by 21h. and the minima were reached between 5d.1h. and 2h. The magnetic field had calmed down by 9h. and it remained fairly quiet with only occasional departures of more than 50γ for the rest of the month. The most disturbed period was 27d.9h. to 24h. and the calmest 6d.20h. to 10d.20h. There was a small movement resembling a "sudden commencement" at 10d.20h.40m.

JUNE (0·53).- This was again a quiet month, but there was rather more mild disturbance than in May.

After 10 days of quiet conditions, minor disturbance broke out on the 11th and persisted until the 15th with no features of special note. Further slight activity marked the 18th-19th, 23rd-24th and 28th-30th, while the intervening periods were relatively quiet.

JULY (0·74).- Although there were no very large storms during July, the magnetic field was subject to almost continuous minor activity.

The month opened with seven fairly quiet days; on the 4th there were no "*K*" indices greater than 1. Mild disturbance developed in the early hours of the 8th, chiefly in the form of small rapid oscillations, and continued intermittently throughout the 9th and 10th. The largest storm of the month occurred on the 11th, when shallow early morning bays in all the elements were followed by moderate afternoon peaks in H and V; the maxima of the month of 14824γ and 47146γ were recorded at 15h.20m. and 14h.17m. respectively. The traces were nearly back to normal by 18h., but mildly active conditions prevailed until the 13th.

Further slight disturbance marked the periods 14th-17th, and 20th-29th; the only noteworthy feature was a trough 300γ deep in H centred at 21d.1h. accompanied by a shallower broader trough in V.

AUGUST (0·68).- This was again a month of considerable minor activity.

There was little of note in the first nine days, conditions being generally quiet. Small peaks in H and V and a depression in D between 10d.15h. and 20h. interrupted this spell, but from 11d.15h. to 15d.19h. it was again quiet. A slight storm on the 16th featured the usual night bays and afternoon peaks in H and V; the largest movement was a decrease of 63·3′ in D between 19h.57m. and 20h.22m. The minor activity which followed came to a head on the 23rd when there was a second storm similar to that on the 16th; this storm gave greater ranges in H and V but a smaller range in D.

Mildly disturbed conditions continued until the 27th, while the last four days of the month were relatively quiet.

SEPTEMBER (0·63).- Magnetic activity in September was largely confined to the period 11d.11h. to 23d.1h.; during this time there were fifteen three-hourly periods with a *K* index of 5 or greater and only 11 with index 2 or less; during the remainder of the month there were 117 periods with index 2 or less and only one with index 5.

The biggest storm occurred between 11d.21h. and 12d.12h., with ranges of 464γ, 59·5′ 428γ in H, D and V respectively. A broad bay 200γ deep in V between 11d.22h. and 12d.2h. was accompanied by a peak in D and a trough 300γ deep in H. A second trough in H centred at 3h.40m. concluded the main movements. The remainder of the disturbed period 11th-22nd was characterized by day after day of slight storms with about uniform diurnal ranges in H, D and V of about 200γ, 30′ and 200γ respectively, and a remarkable absence of larger changes. The period 27d.23h. to 30d.24h. was the quietest spell of the month.

OCTOBER (0·90).– October brought a return to more generally disturbed conditions.

After a brief quiet spell, a storm developed gradually on the morning of the 2nd. H began a steep rise at about 15h. and reached its maximum for the year, 15111γ, at 15h.30m. Simultaneous changes in the other elements were of much smaller magnitude. A sharp peak up to 12° 57·0′ in D at 20h.47m. was accompanied by small troughs in H and V. Further depressions in H and V between midnight and 3d.5h. concluded the main storm, but minor activity continued until the 5th.

The period 6d. to 10d. was somewhat quieter, but the next ten days were marked by practically continuous minor disturbance. Much of the disturbance was of the small rapid irregular oscillation type. Conditions became quiet fairly abruptly at 20d.20h. and remained so until midday on the 28th apart from a few small humps.

A severe magnetic storm began with rises in H and V shortly after 28d.14h. H reached its maximum of 15092γ at 15h.53m. and remained some 400γ above normal until 18h.30m. It then fell over 1250γ to form a deep trough centred at 21h., rose 550γ to a second peak at 22h.30m. and finally plunged 550γ in 15 min. to its minimum of 13447γ at 23h.37m. An hour later it was only a few gamma below normal. Changes in V were not nearly so large, its range being only 520γ. The chief features in the D trace were a peak up to 13° 17·2′ at 18h.17m. and a trough with a minimum of 10° 12·9′ at 23h.58m. Disturbance was renewed in more moderate form at 29d.6h. and continued until the end of the month. The largest change during this period was a decrease of 90′ in D between 29d.21h.29m. and 53m.

NOVEMBER (0·70).– November was as usual a much less stormy month than its predecessor.

The mild activity which prevailed at the opening of the month subsided in the course of the first three days. The ensuing quiet spell was broken by small humps in H and V and a bay in D at 8d.20h. and terminated by the onset of slight disturbance during the 10th and 11th. This was of a much milder form than the minor activity of the preceding month, with few "*K*" indices above 3. Quieter conditions were renewed on the 15th and continued with few interruptions until the 23rd.

The only storm of the month began with falls in all the elements at 23d.21h. H and V formed broad bays, while D made a temporary recovery at 23h.20m. and rose again to a peak at 24d.1h.10m. By 5h. V was rising steadily but H remained subnormal until after 9h. Minor activity continued until the 29th, with no outstanding features. The last day of the month was relatively quiet.

DECEMBER (0·52).– The decrease in magnetic activity noted in November, was maintained in December.

There was nothing of note in the first week; the period 5d.3h. to 6d.19h. was especially quiet. Minor disturbance on the 7th and 8th led up to a moderate storm on the 9th. H and V started rising at 9d.17h. and formed irregular peaks until 21h.; the maximum of 14754γ in H occurred during a sharp increase at 19h.10m. Both elements passed through bays between 22h. and 10d.1h., while D was also mainly subnormal at this time. The storm was virtually over by 10d.1h. but the traces showed signs of mild activity until 12h. and intermittently until the 12th.

The quiet period 13d. to 19d. was followed by a week of slight disturbance with no outstanding features; the 23rd was the most stormy day. The last five days of the month were very quiet. Between 30d.5h. and 16h. there were some regular oscillations in all the elements with a period of about 1·6 min. and a maximum amplitude in H of 6γ.

POTENTIAL GRADIENT (reduced to level surface)
Mean values for periods of sixty minutes between exact hours, G.M.T.

1 LERWICK 1942

	JANUARY, factor 1·19				FEBRUARY, factor 1·16				MARCH, factor 1·26			
	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.
	volts per metre											
1	57	149	152	241	157	176	134	126	–	151	121	160
2	103	<–106	109	–37	84	34	129	56	39	60	21	36
3	115	95	112	83	–	–	–	64	72	91	136	124
4	37	100	138	126	28	123	171	165	166	184	166	166
5	40	98	146	109	106	171	123	53	97	91	133	112
6	86	92	<–588	164	84	90	146	78	88	72	94	127
7	402	115	135	132	53	78	227	104	94	100	127	320
8	66	86	155	143	95	62	<–616	104	Z±	302	175	163
9	49	135	207	313	17	67	361	104	124	199	148	100
10	77	178	146	149	50	50	154	274	54	368	91	106
11	80	109	164	218	48	126	204	53	57	24	121	169
12	181	<–445	210	161	<218	137	>840	>196	115	130	109	118
13	126	–3	<–674	–875	95	216	143	126	>393	142	72	202
14	26	258	218	385	64	104	140	134	205	184	136	121
15	255	250	86	106	53	76	146	182	60	187	103	172
16	103	83	98	95	154	218	210	286	269	516	909	1241
17	89	123	<–502	192	171	252	101	204	275	136	76	–9
18	187	52	89	164	347	188	95	–109	–263	–9	72	109
19	135	146	109	106	132	120	59	87	27	76	230	45
20	121	298	>416	617	64	90	<–532	53	85	82	57	48
21	129	198	273	123	20	73	<280	64	24	350	365	103
22	98	431	164	103	109	148	115	207	88	145	100	127
23	20	–141	80	–49	118	140	134	722	112	184	163	82
24	43	115	83	29	53	42	109	–	94	208	205	109
25	20	–86	26	34	59	101	165	160	223	124	–	>529
26	–	–	57	46	Z–	87	137	106	>453	91	103	133
27	72	210	9	>502	109	106	90	171	94	88	121	112
28	Z±	Z±	118	258	Z±	101	165	157	60	82	85	88
29	135	75	161	115					60	124	118	160
30	<–402	143	141	89					139	169	181	Z±
31	57	>1033	247	164					257	<–151	6	118
(a)	104	191	145	177	100	118	183	159	137	161	151	179
(b)	104	122	137	136	102	129	152	154	87	153	162	162
Mean		(a) 154	(b) 125			(a) 140	(b) 134			(a) 157	(b) 141	

	APRIL, factor 1·36				MAY, factor 1·41				JUNE, factor 1·35			
	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.
	volts per metre											
1	184	92	30	<–526	87	123	42	94	98	140	–195	250
2	82	112	95	99	58	84	107	71	259	247	278	113
3	92	79	106	138	62	65	36	110	82	128	192	372
4	–13	–345	–717	309	36	71	126	–340	140	165	104	220
5	178	–234	<–1546	89	–288	181	146	–217	119	180	238	143
6	39	72	155	–257	75	65	65	120	329	299	342	165
7	290	Z±	89	362	100	237	156	139	128	159	34	88
8	237	211	99	72	75	32	130	52	107	–55	37	6
9	53	82	122	168	120	–65	185	172	46	104	104	82
10	–388	–276	112	155	139	91	175	233	98	125	113	–119
11	76	79	99	197	113	130	139	156	67	110	31	73
12	395	316	214	188	78	97	81	110	24	171	131	171
13	188	230	197	181	78	126	168	198	88	128	95	159
14	158	191	197	230	120	146	120	181	95	88	113	122
15	86	99	214	293	97	39	39	104	70	110	101	168
16	151	89	234	145	133	104	100	330	88	128	192	217
17	197	220	234	290	269	185	253	528	195	49	153	113
18	95	174	296	237	629	282	–165	211	31	70	91	125
19	190	265	9	95	126	162	139	117	137	131	113	171
20	70	85	–	136	87	94	29	97	91	110	113	–
21	70	92	107	117	68	107	156	130	–	122	85	82
22	76	60	95	136	123	133	211	91	–488	235	220	445
23	114	139	126	145	113	123	–3	78	162	149	153	146
24	60	–19	171	265	198	16	–347	–1215	143	85	85	116
25	325	183	155	272	104	181	314	–629	88	101	146	180
26	155	95	98	180	146	324	518	230	101	305	131	220
27	152	171	193	281	288	–528	152	389	91	119	–85	210
28	196	126	196	202	285	Z–	386	152	372	342	122	128
29	196	164	177	130	220	220	217	330	107	174	116	134
30	66	171	123	167	113	55	87	117	116	122	134	134
31					126	87	117	107				
(a)	149	144	146	189	142	127	157	172	124	152	135	163
(b)	117	107	120	171	123	99	116	70	103	147	117	155
Mean		(a) 157	(b) 129			(a) 149	(b) 102			(a) 143	(b) 131	

The potential gradient is reckoned as positive if the potential increases upwards. For indeterminate potential gradient the following notation is used: Z+, indeterminate, positive value; Z–, indeterminate, negative value; Z±, indeterminate, in magnitude and sign.

(a) Mean of all positive readings.

(b) Mean from all complete days using both positive and negative readings.

1 LERWICK 1942

	JULY, factor 1·29				AUGUST, factor 1·35				SEPTEMBER, factor 1·37			
	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.
					volts per metre							
1	116	136	87	107	269	303	165	–3	253	367	246	240
2	61	3	70	191	119	181	135	147	–31	105	120	225
3	–6	131	400	542	98	110	92	147	517	188	49	114
4	310	<–145	165	220	107	73	104	132	157	182	234	256
5	560	719	400	397	113	116	80	116	151	126	123	176
6	592	670	87	441	92	83	248	162	59	206	<–111	216
7	174	180	241	331	89	226	248	358	55	163	172	216
8	165	197	194	116	410	1001	410	236	157	200	219	136
9	186	215	<183	133	263	514	364	967	126	145	151	216
10	122	174	148	206	337	471	196	162	126	154	–216	126
11	209	139	125	133	330	404	367	750	–	179	120	126
12	78	90	110	142	578	557	122	6	95	126	89	182
13	75	275	133	165	110	147	–	199	120	114	132	160
14	96	93	177	241	61	77	132	398	43	95	271	290
15	145	93	145	206	327	358	141	288	157	160	105	–77
16	128	374	104	125	101	119	144	<–138	114	169	151	108
17	122	122	49	87	<–633	147	<–753	162	70	162	96	88
18	122	104	128	171	83	184	92	386	213	438	121	7
19	226	110	206	104	282	407	539	401	114	118	99	195
20	160	223	116	87	517	196	–	548	74	129	55	114
21	99	122	122	104	278	193	428	462	–7	–	<129	140
22	90	136	113	168	150	612	217	156	309	276	118	<66
23	116	96	104	116	64	162	110	226	110	29	169	247
24	78	78	<–203	258	116	177	141	107	–29	162	–22	217
25	113	93	–6	75	159	125	119	55	114	107	144	202
26	58	61	90	191	110	223	713	554	96	114	125	180
27	101	154	(162)	157	465	165	223	230	99	162	247	372
28	93	177	165	206	113	–168	104	171	221	191	309	<–681
29	191	225	151	244	104	190	110	165	–	55	129	221
30	206	197	122	99	110	125	125	162	254	184	247	364
31	61	67	235	180	141	64	187	144				
(a)	162	183	156	192	203	257	216	276	152	166	154	186
(b)	153	185	149	190	199	257	219	262	131	162	130	181
Mean		(a) 173	(b) 169			(a) 238	(b) 234			(a) 165	(b) 151	

	OCTOBER, factor 1·30				NOVEMBER, factor 1·26				DECEMBER, factor 1·28			
	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.
					volts per metre							
1	199	209	312	209	–10	10	127	127	477	688	<293	>600
2	103	135	241	369	62	62	83	72	635	346	>551	<–18
3	>355	82	149	21	34	83	72	28	102	335	318	35
4	–89	128	124	14	38	158	144	110	64	346	166	–81
5	78	124	163	124	114	193	169	>929	7	–81	113	152
6	114	92	43	–4	<–378	103	103	–69	116	173	–	25
7	153	71	199	174	38	134	138	206	131	(113)	226	–88
8	–177	>415	>593	<–21	>464	148	127	131	–582	127	212	311
9	60	75	–53	117	34	100	96	124	134	244	374	300
10	89	188	107	110	127	–513	114	100	<–212	134	240	78
11	78	245	128	174	58	158	83	96	339	148	222	406
12	85	302	<–1029	167	96	<–1170	310	179	102	95	92	187
13	103	192	163	185	79	79	52	–151	169	247	208	272
14	209	–7	–174	64	31	89	120	86	208	159	222	738
15	121	Z±	>621	220	58	131	110	<–120	374	180	138	109
16	4	103	124	128	151	86	114	127	191	201	134	–124
17	78	107	160	138	93	62	117	93	127	145	191	162
18	35	121	142	217	69	127	138	103	<–1712	116	438	434
19	60	85	135	295	48	83	100	224	286	251	134	–113
20	82	224	50	177	172	182	–89	248	109	106	74	307
21	117	167	167	234	<–138	179	103	107	–300	–60	251	367
22	217	362	142	259	69	7	141	175	282	78	304	145
23	<–284	85	82	99	86	55	138	103	109	127	286	385
24	71	167	146	142	55	86	120	131	332	261	134	145
25	<–89	<107	177	501	79	86	127	124	71	102	159	113
26	>444	<–533	50	–121	89	–41	158	169	102	205	78	180
27	202	Z±	53	107	127	175	151	134	Z±	138	311	212
28	11	202	202	202	55	76	141	158	162	240	240	191
29	82	103	131	107	100	206	–	–	46	134	–	67
30	107	227	177	234	138	193	275	482	25	99	78	–371
31	46	295	131	114					53	Z±	169	109
(a)	122	171	175	175	95	113	131	176	183	198	219	241
(b)	87	157	129	164	75	67	116	133	111	159	189	162
Mean		(a) 161	(b) 134			(a) 129	(b) 98			(a) 210	(b) 155	

The factor used for converting the potential at the collector to potential gradient in volts per metre in the open is given for each month.

Annual means				
(a)	139	165	164	190
(b)	116	145	145	162
	(a) 165		(b) 142	

POTENTIAL GRADIENT (reduced to level surface): DIURNAL INEQUALITIES

The departures from the mean of the day are adjusted for non-cyclic change†

2 LERWICK 1942

	Hour G.M.T. 0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Non-cyclic change†	No. of days used	Mean
	volts per metre																										v./m.
	0a days only*																										
Jan.	-14	+20	-18	-28	-38	-40	-25	-29	-12	-14	-10	+14	+29	+14	-1	-13	-14	+13	+36	+40	+27	+25	+30	+10	-73	3	146
Feb.	-23	-28	-38	-10	-19	-35	-26	-1	-1	+11	+7	-2	-3	+17	+7	+34	+43	+45	+32	+5	+15	+11	-17	-21	+20	6	151
Mar.	-48	-57	-51	-49	-38	-41	-27	+4	+21	+11	+7	+7	+18	+19	+56	+39	+30	-7	+27	+37	+54	+30	-3	-39	+33	10	167
Apr.	-6	-10	-12	-16	-20	-9	+12	0	-19	-26	-23	-34	-25	-8	+3	+12	+21	+24	+34	+26	+29	+21	+20	+3	-6	15	172
May	-18	-28	-33	-35	-25	-7	-17	-1	+1	+19	+4	-6	-17	+5	+40	+56	+21	+19	+13	+6	+7	-5	-4	+5	-7	4	130
June	-25	-33	-19	+7	+18	0	+15	-15	+34	+18	-6	-8	-3	+3	+11	+25	-32	-1	-13	+8	+7	+21	0	-13	-20	5	169
July	-30	-25	-4	+6	+2	+21	+58	+31	+13	-39	-32	-14	-37	-40	-22	-10	+21	-6	+43	+60	-1	-11	+15	-1	+24	9	202
Aug.	+33	+8	-37	-30	-15	+7	+28	+80	+43	+19	-27	-34	-18	-26	-33	-28	-41	-32	+14	+11	+29	+9	+22	+19	+17	11	225
Sept.	-11	+9	-32	-38	-41	-36	-36	-14	+20	-19	-38	-21	-24	-17	-5	+1	+6	+38	+52	+75	+56	+50	+24	+1	-4	5	159
Oct.‡	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	–	0	–
Nov.	-13	-27	-28	-26	-15	-3	-9	-1	-11	0	+2	-4	+13	+13	+25	+24	+28	+11	+15	+11	+13	+3	-9	-13	-3	4	101
Dec.	-50	+10	-2	-25	-8	-10	-50	-83	-73	-66	-61	-54	-76	-75	-37	+15	+38	+36	+64	+108	+233	+132	+41	-8	-131	3	243
Year	-19	-15	-25	-22	-18	-14	-7	-3	+1	-8	-16	-14	-13	-9	+4	+14	+11	+13	+29	+35	+43	+26	+11	-5	-14	75	170
Winter	-25	-6	-21	-22	-20	-22	-27	-29	-24	-17	-15	-11	-9	-8	-1	+15	+24	+26	+37	+41	+72	+43	+11	-8	-47	16	160
Equinox	-22	-19	-32	-34	-33	-29	-17	-3	+7	-11	-18	-16	-10	-2	+18	+17	+19	+18	+38	+46	+46	+34	+14	-12	+8	30	166
Summer	-10	-19	-23	-13	-5	+5	+21	+24	+23	+4	-15	-15	-19	-15	-1	+11	-8	-5	+14	+21	+11	+3	+8	+3	+3	29	181

‡ No 0a days in October

	1a and 2a days only*																										
Jan.	-14	-4	+2	-19	-21	-11	+1	-1	+9	+2	+28	+15	+11	-9	+10	+12	+12	-1	+9	+11	+19	-3	-30	-27	-47	2	99
Feb.	-7	-35	-43	-28	-30	-31	-78	-24	-10	+12	+46	+34	+29	+10	+21	+42	+33	+53	+69	+18	+10	-33	-10	-47	+79	3	123
Mar.	+18	+13	-4	+17	+13	-3	-1	+2	+11	-5	-1	+3	+5	+14	-4	-12	-17	-17	-4	-45	+20	-6	-3	+7	-11	6	107
Apr.	+11	-21	-49	-53	-42	-27	-19	+15	+20	+11	-20	-28	-12	+7	+19	+23	+25	+51	+21	+18	-19	+30	-1	+39	-116	4	91
May	-6	-13	-13	-18	-14	-6	+20	+26	+17	+4	+2	+12	+8	+15	-5	+9	+21	+13	+4	-5	-22	-23	-13	-11	+53	7	128
June	-6	-9	+7	+1	-12	+1	-5	-7	+6	0	-6	-15	-15	-7	+4	+6	-1	-9	+9	+12	+19	+13	+9	+3	-4	10	129
July	-7	-21	-5	-10	-4	+21	+36	+11	+28	+34	+24	+19	-1	-18	-21	-14	-9	-21	-15	-8	-3	0	-2	-12	+18	12	133
Aug.	+21	-22	-33	-29	-45	-43	-18	-14	-30	-29	-42	-43	0	+21	+8	+31	+56	+30	+9	+6	+6	+49	+60	+49	+90	8	191
Sept.	+14	+2	-22	-23	-3	+5	+5	+2	-12	-25	-15	-31	-21	-11	+4	-16	-37	-1	+52	+73	+70	+34	-9	-35	+31	7	153
Oct.	-22	-61	-48	-25	-22	-16	-7	-9	+4	-11	-9	-21	-18	-9	+14	+25	+16	+36	+61	+37	+41	+21	+12	+11	+61	6	136
Nov.	-14	-11	+5	+31	+33	+11	-6	-38	-78	-44	-4	-7	-18	+25	+31	+23	+33	+29	+28	+10	+1	-13	-13	-14	+57	7	70
Dec.	-137	-5	-11	+19	+31	+17	+2	+21	-43	-34	-25	-24	+19	-8	+81	+48	+14	-3	+39	+63	+15	-9	-21	-51	+80	4	192
Year	-12	-16	-18	-11	-10	-7	-6	-1	-7	-7	-2	-7	-1	+3	+13	+15	+12	+13	+23	+16	+13	+5	-2	-7	+24	76	129
Winter	-43	-14	-12	+1	+3	-3	-20	-11	-31	-16	+11	+5	+10	+5	+36	+31	+23	+19	+36	+25	+11	-15	-19	-35	+42	16	121
Equinox	+5	-17	-31	-21	-13	-10	-5	+3	+6	-7	-11	-19	-11	0	+8	+5	-3	+17	+33	+21	+28	+20	0	+5	-9	23	122
Summer	+1	-16	-11	-14	-19	-7	+8	+4	+5	+2	-5	-7	-2	+3	-3	+8	+17	+3	+2	+1	0	+10	+13	+7	+39	37	145

Winter: January, February, November, December
Equinox: March, April, September, October
Summer: May to August

* For explanation of 0a, 1a, 2a days see p. 16, *Observatories' Year Book, 1938*

† See p. 10, *Observatories' Year Book, 1938*

	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE	
	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient
		hr.		hr.		hr.		hr.		hr.		hr.
1	1b	1·7	1b	1·8	(1b)	–	2c	5·9	1a	0·2	1b	2·3
2	2b	4·3	(0a)	···	1a	2·4	1b	0·1	1a	0·5	1b	1·5
3	1b	1·7	(1a)	–	0a	···	0a	···	1a	0·5	1b	0·9
4	1b	0·1	1a	0·1	0a	···	2b	9·8	2b	6·9	1b	2·2
5	1b	0·7	2b	3·3	0a	···	2c	10·3	2b	12·2	1a	0·2
6	1b	0·7	0a	···	0a	···	2a	4·8	2b	4·1	0a	···
7	1b	0·3	0a	···	1a	0·3	1b	2·3	1b	0·2	1b	2·1
8	1c	1·8	1b	1·0	1b	0·4	1b	2·6	1b	1·5	2b	4·7
9	1b	0·5	1b	0·8	1a	0·7	1a	0·1	2b	5·1	1b	1·3
10	1b	0·5	1c	1·9	1b	0·2	2c	10·4	1b	1·2	2b	3·1
11	0a	···	1b	2·9	1b	0·5	0a	···	1b	0·4	2b	6·1
12	1b	1·0	1c	2·1	1b	0·2	0a	···	1a	0·2	2b	3·9
13	2c	12·0	1b	0·6	1b	1·7	0a	···	0a	···	1a	0·1
14	2c	3·2	1a	0·9	1a	0·3	0a	···	1a	0·5	(0a)	···
15	0a	···	1a	0·9	1b	0·9	0a	···	1b	2·5	1a	0·2
16	1a	0·2	0a	···	0a	···	0a	···	1b	0·7	1a	0·1
17	1c	2·9	0a	···	2b	5·4	(0a)	···	1b	0·7	1a	0·3
18	1b	1·3	1b	0·9	2b	6·1	0a	···	2c	4·6	1a	0·8
19	1a	0·5	2b	3·1	1b	0·7	1a	0·1	0a	···	1a	0·1
20	2c	4·8	2c	6·2	1a	2·2	(1a)	–	1b	0·7	(1a)	–
21	1b	0·7	2b	3·1	0a	···	1a	0·3	0a	···	(1a)	–
22	(1b)	–	0a	···	0a	···	1b	1·1	0a	···	2b	3·1
23	2b	8·3	1b	0·4	0a	···	0a	···	1a	0·8	0a	···
24	2b	5·3	(0a)	···	1b	0·4	2b	3·6	2b	10·1	1a	0·1
25	2c	9·2	0a	···	(1c)	–	0a	···	2c	4·8	0a	···
26	(1b)	–	2b	3·1	1b	0·3	0a	···	1a	0·1	0a	···
27	2c	5·5	1b	2·5	1a	0·1	0a	···	2c	3·7	1b	2·7
28	2c	3·9	(1c)	–	0a	···	0a	···	2b	3·5	1a	0·1
29	0a	···			0a	···	0a	···	1b	0·8	0a	···
30	2c	4·0			1b	2·3	0a	···	1b	1·7	1a	0·3
31	2c	3·9			2c	7·5			1b	1·6		
Total	39	79·0	25	35·6	24	32·6	20	51·4	36	69·8	29	36·2
No. of days used	31	29	28	26	31	29	30	29	31	31	30	28
Mean	1·26	2·7	0·89	1·4	0·77	1·1	0·67	1·8	1·16	2·3	0·97	1·3

	JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER	
	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient
		hr.		hr.		hr.		hr.		hr.		hr.
1	1a	0·2	1a	0·7	0a	···	1b	0·3	1a	1·7	1c	2·7
2	1a	0·5	0a	···	1a	1·5	1c	1·3	1a	0·5	1c	2·6
3	1b	1·3	1a	0·2	1b	1·5	2c	5·3	1a	0·3	2c	6·2
4	1b	0·4	1a	0·1	1a	0·3	2b	3·4	1b	1·9	2b	5·2
5	0a	···	0a	···	1b	0·8	1c	2·6	1c	1·4	2b	6·0
6	1b	0·2	1a	0·2	1b	1·2	1b	2·8	2c	6·6	(2b)	–
7	0a	···	0a	···	1b	0·5	2b	5·6	1b	1·9	2b	3·8
8	1a	0·7	0a	···	1b	1·7	2c	3·7	1b	0·5	2b	4·5
9	2c	3·6	0a	···	1a	0·1	2b	5·8	1a	0·2	1a	0·6
10	1b	2·9	1b	1·7	(1b)	–	1c	1·1	2a	7·7	2b	4·1
11	1a	0·1	1b	0·5	(1a)	–	1b	0·5	(1a)	–	0a	···
12	0a	···	1b	1·4	0a	···	2c	3·5	2c	3·3	1b	1·1
13	1a	0·4	(0a)	···	0a	···	1c	0·7	2b	5·7	1b	2·7
14	0a	···	1a	0·1	2c	3·4	2b	7·4	1a	1·2	0a	···
15	1b	2·2	1b	2·4	2c	3·9	1c	2·8	1c	1·3	1b	0·5
16	1a	0·6	1b	0·7	1b	2·3	1b	1·2	1b	0·5	1b	0·8
17	1a	0·2	2b	3·4	(1a)	–	1a	0·3	0a	···	1b	1·1
18	0a	···	1a	0·7	2b	4·4	1a	0·7	0a	···	2c	7·3
19	0a	···	1b	1·4	1a	0·7	1a	0·2	1b	1·4	1b	1·9
20	0a	···	(1b)	–	0a	···	1b	1·9	1c	1·3	1b	0·3
21	1a	0·1	1b	1·7	(2b)	–	1a	0·3	1b	1·1	2b	3·3
22	0a	···	1b	0·3	1b	1·3	1b	2·5	1b	1·8	1a	0·8
23	1a	0·1	0a	···	1b	2·0	1b	0·6	1a	0·4	1a	0·5
24	2b	3·9	0a	···	1b	2·0	1b	0·8	0a	···	0a	···
25	1b	2·7	1a	0·1	1a	1·1	1c	2·2	0a	···	1a	0·5
26	1a	0·5	1a	0·3	1a	0·2	2c	5·1	1b	1·6	2b	4·9
27	1b	0·7	0a	···	0a	···	2c	6·1	1b	0·3	1c	0·6
28	1a	0·1	2b	3·8	2b	3·1	1a	0·3	1b	0·5	1c	1·9
29	0a	···	0a	···	(1a)	–	1a	0·5	(1b)	–	(2c)	–
30	1a	0·1	0a	···	1a	0·3	1c	0·7	1c	0·5	2c	3·7
31	1b	1·7	0a	···			1c	1·5			1c	2·0
Total	24	23·2	21	19·7	30	32·3	40	71·7	30	43·6	40	69·6
No. of days used	31	31	31	30	30	25	31	31	30	28	31	29
Mean	0·77	0·7	0·68	0·7	1·00	1·3	1·29	2·3	1·00	1·6	1·29	2·4

Annual values: Character 0 1 2 — No. of days used 80 212 73

Mean character figure 0·98 (365 days)

Duration: Total 564·7 hr. — No. of days 346 — Mean 1·63 hr.

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

4 LERWICK (H) — 14,000γ (0·14 C.G.S. unit) + — JANUARY 1942

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1 q	387	387	388	389	391	396	398	397	397	396	395	390	389	395	398	398	390	403	401	399	396	391	393	391	394
2	392	396	396	398	402	409	416	409	406	398	401	396	394	396	397	403	398	393	392	394	368	374	378	382	395
3 d	387	392	384	381	388	387	387	382	375	374	375	367	379	387	394	379	392	390	387	382	385	383	383	366	383
4 d	377	377	371	371	414	397	400	401	393	391	389	385	383	385	383	383	388	382	385	405	397	350	349	371	384
5 d	379	357	360	351	384	391	388	379	371	354	355	380	387	388	390	382	380	383	397	379	378	381	383	405	*378*
6	379	379	377	378	383	389	385	386	383	380	376	380	381	386	388	384	384	383	395	381	384	391	413	383	385
7	388	375	376	377	391	383	395	394	391	388	379	363	368	385	392	392	393	388	386	396	397	387	388	387	386
8	390	388	391	392	392	394	392	391	389	387	385	383	385	390	391	384	386	390	393	393	392	392	392	399	390
9	397	394	391	396	401	401	400	394	393	391	388	384	386	392	395	396	392	390	391	394	394	394	393	397	393
10	400	387	387	394	396	396	395	397	397	395	393	390	391	391	386	392	380	378	387	390	389	389	399	386	391
11	385	379	390	394	396	400	395	394	385	384	383	384	374	385	393	392	388	383	379	386	389	391	391	391	388
12	391	386	391	389	395	397	396	397	391	379	378	384	390	394	394	391	387	383	388	387	392	385	392	388	389
13	388	389	390	389	391	397	399	395	389	388	385	380	376	381	384	393	391	389	388	387	392	395	395	393	389
14	393	393	394	398	398	402	403	405	400	394	388	388	391	396	396	397	399	402	403	400	403	395	408	399	*398*
15	391	387	398	390	391	391	398	403	398	388	391	392	393	396	394	385	385	393	394	394	389	388	388	380	391
16	377	389	388	390	392	396	400	400	398	392	382	373	375	382	383	384	384	380	381	379	374	378	382	377	385
17 d	363	375	378	389	394	407	394	366	342	348	337	361	381	390	382	379	382	388	394	395	395	394	394	393	380
18 d	388	374	334	384	377	384	394	393	377	379	376	380	383	383	378	387	392	397	398	397	387	395	368	355	382
19	337	341	362	386	376	366	386	390	385	378	374	373	384	387	387	388	393	392	392	390	386	384	385	397	380
20	376	382	385	388	391	392	391	389	386	382	378	377	384	385	387	388	389	386	387	388	388	385	389	390	386
21 q	391	390	391	391	392	393	394	391	391	390	392	392	391	395	393	392	394	400	391	390	385	386	387	391	391
22	391	391	389	387	395	402	403	403	398	391	388	383	384	374	374	374	378	378	374	374	377	377	373	380	385
23	383	375	381	391	392	393	401	401	398	391	384	382	383	387	381	381	385	390	394	395	393	391	388	390	389
24 q	388	386	387	391	392	394	395	396	395	394	388	386	383	387	392	395	397	399	400	401	402	398	395	385	393
25	386	389	392	393	396	398	399	399	398	394	389	385	386	397	402	403	403	399	400	390	387	393	391	391	394
26 q	390	389	385	386	391	395	398	394	393	382	379	380	388	394	397	396	398	396	396	396	393	388	391	391	391
27	391	392	392	392	395	398	398	396	392	380	386	389	389	395	398	396	398	391	392	395	387	391	384	381	392
28	382	386	383	392	400	400	388	398	399	392	375	381	383	376	382	386	389	396	398	397	390	382	389	388	389
29	387	388	387	389	391	392	393	393	392	386	382	379	380	386	396	402	402	395	394	389	379	380	377	383	388
30	381	380	386	389	391	400	402	400	397	391	385	386	388	393	397	403	411	405	403	403	403	397	395	395	395
31 q	396	392	391	394	395	398	400	402	402	398	390	386	388	394	396	400	400	400	400	400	402	400	397	397	397
Mean	385	383	383	388	393	395	*396*	395	390	386	382	*382*	384	389	390	390	391	391	392	392	389	387	388	387	389

Corrections to be applied to all values: H, −6γ; D, −4·2′; V, −10γ.

MAGNETIC DECLINATION (WEST)

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

11° +

5 LERWICK (D) — JANUARY 1942

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1 q	61·1	61·1	60·7	60·0	60·8	61·3	60·9	60·3	60·5	60·3	61·7	62·6	63·3	62·8	62·5	61·7	61·5	61·8	61·9	61·5	60·1	60·4	60·6	61·1	61·3
2	61·4	61·5	61·4	61·7	63·3	61·5	61·3	61·5	62·1	63·1	63·3	62·8	63·9	68·7	69·7	71·2	77·6	77·2	66·6	57·7	50·8	53·7	53·7	56·6	*63·0*
3 d	60·1	65·1	63·4	61·5	60·8	61·4	63·7	64·6	55·0	64·7	65·8	64·2	62·9	64·6	66·1	67·8	64·7	64·9	63·0	61·4	60·2	58·6	58·0	55·4	62·8
4 d	57·7	59·2	59·8	56·7	52·4	57·4	61·0	62·7	59·7	61·1	62·5	63·0	66·3	65·9	61·4	62·0	68·3	62·8	61·3	59·2	56·1	49·0	45·8	51·8	59·3
5 d	58·2	57·6	58·6	61·4	62·5	62·4	63·0	62·9	65·0	67·3	65·2	62·5	64·0	64·7	63·3	62·4	61·3	63·1	58·6	52·5	57·9	60·1	57·0	61·6	61·4
6	60·0	59·2	60·4	61·2	61·5	61·8	60·1	61·0	61·6	61·7	61·5	60·5	62·8	63·4	63·5	61·5	64·9	61·3	43·3	57·8	60·0	53·1	53·8	56·1	59·7
7	56·5	56·9	55·0	60·1	57·8	58·9	59·3	60·0	60·8	61·2	61·5	51·7	61·9	62·5	61·7	59·9	59·8	61·1	60·4	56·2	57·7	60·0	59·8	59·8	59·6
8	61·0	61·1	60·4	60·1	60·5	60·6	60·5	60·3	60·0	60·8	61·5	62·4	63·2	62·6	62·7	61·2	62·0	61·5	61·4	61·1	60·4	59·7	59·7	60·4	61·0
9	58·3	59·4	59·9	61·5	59·2	58·9	59·6	60·0	59·9	60·5	61·2	61·8	62·5	62·5	61·9	61·6	62·5	62·1	62·4	61·9	61·5	59·7	59·5	54·4	60·5
10	50·8	55·2	57·5	58·3	59·8	61·0	60·3	61·5	61·2	61·6	52·4	53·7	65·1	64·3	63·0	62·7	59·9	58·9	62·2	60·9	59·4	54·6	52·5	60·3	59·9
11	61·9	64·5	60·1	58·4	59·6	60·1	60·6	61·5	62·3	63·0	64·0	64·6	64·2	64·6	62·1	51·7	61·8	62·4	61·5	57·1	54·4	55·7	58·6	60·5	61·0
12	61·1	61·2	59·1	59·9	59·0	59·4	59·7	59·7	60·4	61·0	62·5	63·3	63·8	64·2	62·9	63·4	62·5	61·5	60·8	60·8	47·8	55·6	60·2	60·4	60·4
13	61·9	61·7	60·8	60·8	60·7	60·2	60·2	60·5	60·8	60·1	50·2	52·4	64·4	54·9	63·5	61·9	61·5	60·6	58·9	60·1	59·1	60·3	60·2	61·0	61·1
14	61·4	61·7	61·1	60·7	61·1	61·0	60·6	60·3	59·9	60·3	60·7	62·4	63·7	53·4	62·5	62·1	62·3	62·9	62·7	62·5	62·0	60·1	55·2	54·4	61·0
15	58·9	58·8	58·8	58·6	59·1	59·0	59·1	59·1	59·9	61·2	62·4	65·0	67·4	67·9	70·5	72·8	65·7	61·9	61·8	61·6	60·6	58·6	58·8	62·1	62·1
16	58·9	57·6	55·3	56·4	57·7	58·6	58·7	59·9	61·1	62·0	63·3	65·5	68·5	69·4	69·4	71·7	72·6	71·5	62·1	56·2	50·7	57·6	60·3	58·7	61·8
17 d	59·1	53·9	56·2	58·8	61·4	60·0	64·8	66·9	71·0	66·6	71·9	69·5	67·2	67·2	64·7	62·6	61·6	61·6	60·6	60·5	60·4	59·9	60·3	60·4	62·8
18 d	60·4	56·3	55·4	48·0	55·7	58·1	60·3	62·4	63·1	64·2	61·0	62·1	63·7	63·2	62·1	60·6	61·5	62·0	62·7	62·8	60·6	55·5	39·1	51·8	*58·9*
19	59·7	62·4	62·3	57·0	61·6	70·5	66·0	61·9	62·0	63·6	61·9	62·2	63·2	63·1	61·3	60·5	61·1	61·3	60·9	60·4	59·2	59·3	57·5	56·2	61·5
20	60·5	63·5	59·3	60·0	59·8	60·1	60·0	60·1	60·1	61·1	52·2	63·6	64·4	63·6	62·0	60·7	60·7	59·9	60·6	59·9	59·7	57·7	60·5	60·1	60·9
21 q	60·9	60·8	60·6	60·6	60·5	60·2	59·9	60·0	60·9	61·9	62·9	63·3	62·2	62·0	61·4	60·8	61·0	61·0	61·6	61·0	59·6	56·1	58·2	59·8	60·7
22	60·6	60·9	60·1	61·6	59·5	58·1	58·2	59·6	60·9	61·6	63·0	54·3	66·8	66·9	67·9	67·9	64·8	62·6	60·8	56·5	54·9	51·8	52·4	55·4	60·7
23	54·1	56·3	59·9	59·8	59·9	60·7	60·6	60·8	62·4	52·5	63·8	64·4	64·1	65·5	65·4	66·5	64·1	62·9	61·8	60·7	59·8	59·3	59·4	57·1	61·3
24 q	57·1	58·6	59·9	59·8	60·1	60·2	59·9	59·5	59·7	60·9	61·8	52·2	62·1	63·0	62·9	62·8	62·3	62·2	62·1	61·9	61·4	59·0	52·5	55·8	60·3
25	58·2	59·7	60·1	60·0	60·0	60·3	60·3	60·3	60·0	60·6	62·6	63·2	54·2	65·3	64·6	62·5	62·4	62·0	62·1	61·8	58·5	60·5	60·4	59·2	61·2
26 q	58·2	58·5	58·5	57·7	56·8	57·6	58·6	59·3	58·6	59·1	61·3	62·9	64·9	64·1	64·6	63·0	62·8	62·6	61·7	61·8	61·6	60·2	59·3	59·6	60·6
27	60·0	60·3	60·2	60·1	60·3	60·2	60·1	59·4	59·3	60·4	61·8	62·6	65·1	65·7	64·3	63·9	64·7	65·7	62·8	61·5	60·3	59·6	58·5	54·6	61·3
28	55·1	56·8	53·9	56·5	54·6	55·3	58·7	61·6	59·3	61·2	62·6	66·3	68·2	69·2	67·4	64·6	61·5	60·7	60·8	60·9	55·3	57·6	59·7	59·0	60·3
29	59·0	59·3	60·1	60·0	58·9	59·5	59·6	59·2	58·3	58·7	60·6	62·0	63·9	64·6	64·1	62·6	62·1	63·2	64·5	63·8	58·6	56·3	56·3	53·5	60·4
30	56·5	54·6	54·7	55·2	55·2	56·5	58·1	58·8	59·4	61·0	62·0	64·6	57·4	67·4	67·9	66·5	69·2	69·0	64·4	60·8	62·0	61·2	58·1	58·1	61·2
31 q	59·2	60·2	60·3	60·3	60·1	61·1	60·7	59·8	59·1	60·2	60·9	62·4	63·5	63·6	62·6	62·6	62·6	62·6	62·2	61·2	60·7	60·3	60·0	60·2	61·1
Mean	59·0	59·5	59·2	59·1	59·4	60·1	60·5	60·8	61·1	61·7	62·6	63·4	64·5	*64·9*	64·2	63·7	63·6	63·1	61·2	60·1	58·4	57·8	*57·0*	57·9	60·9

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

6 LERWICK (V) — 46,000γ (0·46 C.G.S. unit) + — JANUARY 1942

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1 q	909	909	908	907	905	903	901	901	900	902	903	906	905	906	908	908	906	903	903	904	905	907	903	903	905
2	901	900	901	900	897	893	891	892	891	893	892	897	901	903	909	920	948	979	968	990	985	951	948	933	920
3 d	928	920	921	920	910	898	865	860	863	872	880	893	897	907	917	947	940	931	940	954	963	963	939	915	914
4 d	908	904	903	871	836	860	880	885	895	898	899	905	906	909	937	956	942	943	946	1004	986	930	926	907	914
5 d	898	898	857	863	864	892	901	903	908	910	913	915	915	916	919	931	942	960	946	922	920	908	907	871	907
6	887	899	905	898	892	886	894	897	901	905	908	903	903	907	910	917	922	935	933	917	914	913	874	862	903
7	860	885	894	896	894	903	902	903	903	901	903	903	908	906	910	914	915	913	913	912	905	905	903	903	902
8	898	896	898	902	903	904	905	905	904	901	900	903	902	902	907	909	908	908	907	907	907	905	903	898	903
9	895	893	897	894	891	894	898	900	901	903	903	903	902	901	902	903	907	909	908	908	909	911	909	898	902
10	877	882	894	895	896	895	898	899	900	904	905	905	902	902	908	909	922	934	921	914	914	911	897	900	903
11	897	876	882	893	897	896	898	899	905	901	902	904	907	906	907	909	911	915	920	922	913	908	908	904	903
12	899	900	893	897	894	896	898	899	904	910	911	909	908	907	907	909	909	914	914	918	925	910	905	905	906
13	903	899	903	904	902	899	899	899	902	906	909	912	913	908	907	905	905	908	909	912	909	908	906	904	905
14	903	902	901	899	898	895	895	895	898	900	903	902	900	901	902	901	899	898	898	900	901	908	893	887	899
15	897	906	908	906	902	899	892	889	892	893	894	899	900	904	914	930	934	921	913	908	912	915	915	909	906
16	907	907	907	905	901	899	897	894	893	897	901	906	908	915	924	941	956	987	990	983	973	934	920	915	*923*
17 d	908	863	891	893	899	893	888	892	896	900	916	920	919	917	916	925	924	913	908	905	906	903	903	905	904
18 d	908	891	873	859	894	900	899	897	903	898	903	903	909	913	916	916	913	910	910	909	919	871	863	867	898
19	834	818	836	878	868	818	846	872	888	894	901	908	907	911	913	916	917	915	912	913	912	910	905	882	*886*
20	887	870	892	903	906	907	908	908	907	905	905	906	906	906	907	909	912	915	913	910	909	909	893	895	904
21 q	899	902	903	905	905	906	906	906	905	901	899	901	903	902	905	907	907	907	915	915	917	920	914	905	906
22	902	902	901	900	886	883	888	894	898	900	899	902	903	913	922	941	943	947	958	959	947	937	916	893	914
23	878	884	887	888	894	898	897	898	899	901	904	907	908	907	915	916	916	915	912	911	910	910	910	906	903
24 q	902	901	900	900	901	902	903	903	901	900	903	907	906	900	898	900	900	901	903	904	905	907	903	900	902
25	900	901	902	903	902	901	901	902	901	901	900	902	901	900	898	899	900	903	908	919	928	920	916	915	905
26 q	910	903	901	905	903	902	901	904	906	910	909	908	904	903	903	902	902	903	904	905	909	916	913	910	906
27	907	905	903	902	899	899	899	899	901	904	902	904	902	899	901	905	907	913	916	915	921	918	919	915	906
28	906	899	884	867	873	882	888	882	891	897	904	901	901	908	915	916	919	911	907	907	912	917	909	908	900
29	905	904	905	904	902	900	899	899	900	903	903	903	902	902	902	905	905	907	909	927	952	938	924	914	909
30	914	909	906	905	903	895	894	894	896	898	900	899	900	901	903	905	906	910	912	910	910	921	922	915	905
31 q	910	909	908	905	902	900	898	896	895	894	895	896	898	899	903	904	903	901	900	900	898	898	898	898	900
Mean	898	895	896	896	894	*893*	894	896	898	900	902	904	905	906	910	915	917	920	920	922	*922*	916	909	901	905

Corrections to be applied to all values: H, -6γ; D, $-4{\cdot}2'$; V, -10γ.

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

7 LERWICK — JANUARY 1942

	TERRESTRIAL MAGNETIC ELEMENTS															3-hr. range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force						Declination				Vertical force								
	Maximum 14,000γ +			Minimum 14,000γ +		Range	Maximum 11° +		Minimum 11° +		Range	Maximum 46,000γ +			Minimum 46,000γ +		Range				
	h. m.	γ		γ	h. m.	γ	h. m.	′	′	h. m.	′	h. m.	γ		γ	h. m.	γ						°A.
1 q	17 18	406		386	11 55	*20*	12 34	64·0	57·8	20 51	6·2	1 15	910		901	8 10	*9*	0,0,1,1,0,0,1,1	4	0	76·5
2	6 12	420		352	19 57	68	15 57	*81·3*	40·1	20 7	*41·2*	19 41	1027		890	6 26	137	0,2,1,2,3,3,4,3	18	1	77·0
3 d	5 56	409		357	23 12	52	15 8	72·2	51·7	23 48	20·5	21 10	972		857	7 11	115	3,3,2,2,2,3,2,3	20	1	77·1
4 d	4 11	433		*289*	22 8	144	16 35	75·1	40·2	21 52	34·9	19 34	*1030*		829	4 35	*201*	2,4,2,2,3,3,4,4	24	1	77·4
5 d	18 35	444		329	19 2	115	19 0	77·2	41·7	19 10	35·5	18 12	1018		842	3 8	176	3,3,2,3,2,3,5,3	24	1	76·5
6	22 18	455		362	18 12	93	16 51	69·2	32·8	18 33	36·4	18 14	957		854	24 0	103	2,2,1,2,2,3,4,3	19	1	75·4
7	20 41	408		344	12 5	64	12 54	64·3	53·0	2 55	11·3	16 12	918		851	0 7	67	3,3,1,2,3,2,2,1	17	1	75·0
8	23 12	408		380	11 39	28	12 24	53·5	58·8	1 19	*4·7*	15 32	909		893	2 1	16	2,0,0,0,1,1,0,1	5	0	74·7
9	23 49	413		383	11 34	30	16 55	63·4	46·9	24 0	16·5	21 40	913		885	24 0	28	1,2,0,0,0,0,1,1,3	8	0	74·8
10	22 12	422		366	17 20	56	12 30	67·1	45·8	22 8	21·3	17 21	941		871	0 51	70	3,2,1,1,2,3,2,3	17	1	74·6
11	20 19	404		366	12 37	38	1 20	67·2	50·0	20 14	17·2	19 39	926		864	1 49	62	2,1,2,2,2,2,3,2	16	0	74·3
12	20 42	414		371	9 54	43	13 30	64·7	32·3	20 35	32·4	20 32	935		887	2 26	48	2,1,1,2,1,2,4,3	16	1	74·6
13	7 0	400		374	13 1	26	13 6	66·0	56·6	18 45	9·4	19 33	914		897	1 19	17	1,0,0,1,1,1,2,0	6	0	75·0
14	22 50	421		386	10 57	35	12 39	64·1	48·0	22 59	15·1	21 41	913		883	23 31	30	1,0,0,0,0,1,1,3	6	0	75·5
15	7 19	411		368	24 0	43	15 12	74·8	56·4	21 21	18·4	16 7	940		885	6 54	55	2,0,2,1,2,3,1,2	13	0	75·8
16	6 55	403		362	12 29	41	17 23	77·0	45·9	20 19	31·1	18 19	1001		893	8 28	108	2,2,1,2,2,3,3,2	17	1	75·7
17 d	5 14	412		326	10 19	86	10 39	74·4	48·2	1 30	26·2	16 5	930		844	1 28	86	3,2,3,3,2,2,1,0	16	1	75·2
18 d	21 20	*477*		302	2 36	*175*	21 39	67·2	*26·0*	22 0	*41·2*	21 18	957		*788*	21 40	169	4,3,2,2,2,2,2,5	22	1	75·1
19	23 12	418		314	0 54	104	5 11	78·1	53·8	23 54	24·3	16 36	894		797	0 58	97	3,4,3,2,1,1,1,3	18	1	75·1
20	4 57	396		366	0 14	30	1 0	66·3	54·8	0 0	11·5	17 4	916		862	1 9	54	3,1,1,1,1,0,1,2	10	0	75·0
21 q	17 32	404		378	21 13	26	10 59	64·3	53·2	21 34	11·1	21 15	924		898	10 9	26	0,0,0,1,1,1,1,2	7	0	74·7
22	5 51	409		367	15 15	42	14 54	69·6	50·9	21 31	18·7	19 25	963		879	4 53	84	0,2,1,1,2,3,3,3	15	0	74·5
23	6 56	405		374	1 21	31	15 35	67·7	51·8	0 4	15·9	14 42	919		875	0 14	44	2,1,2,1,2,2,1,1	12	0	74·4
24 q	22 0	409		382	12 25	27	13 12	63·5	49·4	22 25	14·1	21 55	912		895	14 5	17	1,0,1,1,1,0,0,3	7	0	75·0
25	16 49	407		375	19 50	32	14 1	66·2	56·1	20 5	10·1	19 52	932		898	14 47	34	1.0,0,1,1,1,2,1	7	0	74·6
26 q	16 42	400		375	11 31	25	14 15	65·6	56·1	4 28	9·5	21 37	919		900	1 44	19	1,1,1,1,1,1,0,0,1	5	0	73·6
27	13 47	402		375	23 54	27	17 25	67·6	53·1	23 5	14·5	20 23	923		898	13 56	25	1,0,0,2,1,2,2,2	10	0	72·5
28	3 42	409		368	2 54	41	13 31	70·6	51·2	20 9	19·4	16 10	920		858	3 56	62	3,2,2,2,2,2,3,2	18	1	73·1
29	19 17	406		368	22 37	38	19 37	67·3	50·6	23 30	16·7	20 44	954		898	6 22	56	1,1,0,0,1,1,3,2	9	0	73·3
30	16 12	418		376	1 28	42	16 42	70·6	53·1	2 2	17·5	22 1	926		893	5 57	33	2,1,1,0,1,2,2,2	11	0	73·4
31 q	8 40	403		383	12 12	*20*	12 47	64·1	57·7	0 0	6·4	0 7	912		894	8 42	18	1,0,0,1,0,0,0,0	2	0	73·5
Mean	- -	414		361	- -	53	- -	68 8	49·2	- -	19·7	- -	940		873	- -	67	1·6	12·9	0·42	74·9

q denotes an international quiet day and d an international disturbed day.

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

8 LERWICK (H) — 14,000γ (0·14 C.G.S. unit) + — FEBRUARY 1942

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	399	400	400	400	401	403	403	406	406	403	400	400	403	404	403	400	403	408	407	406	400	393	400	391	402
2	393	393	392	399	409	414	402	395	381	366	379	381	382	381	374	383	381	385	394	394	392	390	390	399	390
3	387	390	382	387	396	397	390	399	394	383	380	377	377	383	385	389	393	396	396	397	393	394	395	393	390
4	393	394	396	396	397	398	399	398	395	387	385	384	386	389	396	392	398	398	399	396	401	401	405	404	395
5 d	400	399	399	400	390	383	406	394	394	390	374	362	378	391	380	383	385	397	430	374	384	380	380	382	389
6 d	383	375	376	373	384	387	394	388	374	367	357	338	359	366	375	379	370	384	418	426	377	316	290	326	370
7	358	365	363	376	381	382	383	387	387	386	374	384	394	397	393	388	385	388	392	393	392	390	385	389	384
8 q	388	387	386	389	395	395	396	394	394	392	388	382	383	387	389	391	389	392	395	397	397	394	397	392	391
9 q	385	386	388	389	392	395	396	395	391	382	382	386	384	386	391	389	387	394	396	396	396	397	399	397	391
10	397	396	396	394	394	394	394	392	391	397	398	394	389	379	397	400	396	391	397	384	385	388	391	405	393
11	376	380	385	389	391	391	385	391	394	393	392	390	392	394	397	396	387	387	389	374	373	361	370	382	386
12 q	385	381	386	381	389	392	392	389	386	385	384	387	388	391	394	394	394	395	397	401	399	398	398	396	391
13	395	387	374	392	405	406	408	403	398	392	387	383	388	386	390	396	400	401	403	402	399	395	396	397	395
14	397	397	398	401	403	405	405	407	400	394	390	391	391	399	403	388	392	395	399	401	396	393	380	383	396
15	347	377	385	387	388	395	389	415	405	390	380	383	367	377	390	398	402	400	389	388	392	392	391	401	389
16	389	395	395	400	398	394	402	394	384	382	382	383	392	390	392	385	393	398	401	398	394	390	393	389	392
17	393	387	388	386	380	396	395	395	391	388	382	387	392	393	394	393	391	391	395	398	392	393	394	395	391
18 q	392	390	384	392	390	392	398	398	387	383	381	383	383	386	391	392	392	393	396	397	398	397	397	396	391
19	397	397	396	398	398	399	397	396	392	387	386	389	398	408	403	399	400	399	402	407	407	403	402	397	398
20	398	397	397	399	395	403	399	397	388	377	377	380	385	389	405	400	390	396	391	398	394	395	391	400	393
21	385	388	383	384	378	388	397	392	385	382	380	375	377	363	372	385	390	396	393	396	395	391	389	385	385
22	379	381	393	393	393	393	397	393	389	384	383	383	388	389	398	402	406	398	403	402	396	394	386	389	392
23 d	401	378	375	380	389	397	396	397	389	386	381	377	384	403	442	529	851	722	748	649	259	295	245	324	*437*
24 d	326	75	242	347	363	376	383	375	340	354	383	382	379	384	395	392	385	387	385	389	395	396	411	384	*360*
25	375	357	351	361	373	379	380	378	375	375	374	379	383	394	400	391	397	381	392	393	416	380	387	405	382
26	367	379	381	383	386	396	393	389	388	386	382	379	379	386	386	388	393	393	396	389	387	385	389	383	386
27	385	385	384	382	388	394	391	390	385	379	373	375	382	385	388	409	404	410	409	406	392	408	401	394	392
28 d	361	383	377	374	389	393	395	387	371	376	368	369	310	413	489	483	649	448	396	396	388	382	369	366	401
Mean	383	*375*	380	387	391	394	395	394	388	384	381	381	382	389	397	401	*418*	408	411	405	389	385	383	387	391

Corrections to be applied to all values: H, −6γ; D, −4·2′; V, −10γ.

MAGNETIC DECLINATION (WEST)

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

9 LERWICK (D) — 11° — FEBRUARY 1942

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	60·6	60·5	60·6	60·8	61·0	60·4	60·3	60·0	59·5	59·3	60·1	61·6	63·6	63·9	63·5	63·6	63·4	63·1	61·9	61·7	61·5	60·4	59·1	58·4	61·2
2	59·5	60·7	61·5	59·7	59·3	60·0	61·5	63·5	62·5	64·1	64·2	61·8	64·5	65·7	66·7	61·5	56·9	61·6	60·4	59·4	58·7	59·8	59·6	57·7	61·3
3	58·9	60·9	61·7	62·1	59·6	59·2	59·7	60·0	59·7	60·6	60·6	62·1	63·1	63·3	62·9	62·4	61·2	59·3	58·8	60·2	59·4	59·1	59·0	59·6	60·6
4	60·2	60·7	60·8	60·3	60·0	59·7	59·3	59·0	58·5	59·4	61·1	62·6	64·4	64·3	64·6	63·6	63·1	62·4	62·4	61·9	61·8	60·9	60·6	59·9	61·3
5 d	56·8	58·8	59·9	59·0	58·3	62·6	61·7	65·2	66·5	64·2	63·2	66·5	69·8	70·1	69·9	64·4	64·2	57·7	37·3	61·3	61·8	60·2	60·7	58·9	*61·6*
6 d	59·4	57·8	38·4	49·9	51·7	56·4	57·3	59·7	60·1	63·2	63·0	64·6	66·3	66·5	65·8	56·5	45·0	59·8	56·4	54·4	43·2	43·7	50·5	65·2	*56·5*
7	64·6	66·7	62·8	56·8	58·9	58·3	59·3	59·4	58·5	59·4	61·5	59·2	60·1	61·0	59·0	58·0	58·9	60·0	60·0	59·7	59·6	58·9	57·9	59·2	59·9
8 q	59·9	59·2	60·2	60·6	60·0	59·1	58·9	59·4	59·9	60·8	61·4	62·6	62·7	62·5	61·1	60·1	60·0	60·8	61·0	60·8	60·2	59·9	58·9	55·1	60·2
9 q	58·4	59·3	58·8	58·8	58·9	59·2	59·1	59·3	59·2	61·4	63·5	65·8	64·6	63·8	62·7	61·6	61·2	60·7	60·5	60·4	59·8	59·8	60·1	60·0	60·7
10	60·1	60·1	60·1	59·9	59·7	59·7	59·0	59·2	59·8	61·5	63·3	63·6	64·3	64·3	64·5	63·3	62·8	54·4	63·3	62·4	58·9	59·9	60·0	56·9	60·9
11	55·4	56·6	55·6	57·5	56·9	56·7	58·9	59·4	59·9	61·5	62·8	63·8	65·8	65·5	64·6	63·3	65·1	64·7	64·4	63·4	56·3	51·5	54·5	58·0	60·1
12 q	60·6	59·7	60·8	60·5	59·2	58·5	58·4	58·7	58·8	60·2	61·0	61·7	61·9	62·0	61·5	60·7	60·7	61·0	60·7	60·5	60·2	60·1	60·1	60·2	60·3
13	59·9	59·0	64·5	61·8	58·6	59·1	58·9	58·6	58·5	59·8	61·1	62·2	63·7	63·0	62·8	61·4	60·5	60·4	60·6	60·6	60·6	60·0	59·9	60·2	60·7
14	61·2	60·9	60·6	60·5	60·2	59·9	59·6	59·4	59·2	61·1	63·1	65·0	63·6	63·6	63·8	63·4	60·9	60·6	59·9	59·6	59·5	56·2	50·7	52·2	60·2
15	47·8	54·1	57·9	56·4	54·7	56·9	62·4	59·8	61·5	60·5	62·5	65·4	66·8	65·2	63·5	62·1	61·1	60·8	58·0	55·1	59·2	59·2	58·3	58·5	59·5
16	57·0	63·5	60·3	57·9	58·5	59·4	59·1	59·8	60·3	63·0	65·4	63·2	62·7	62·5	63·2	60·7	60·6	60·8	60·8	61·2	60·1	56·1	47·9	59·2	60·1
17	59·6	59·6	60·5	50·7	50·9	54·0	58·2	59·2	60·3	62·6	62·7	63·0	63·8	62·9	61·3	59·4	58·9	59·7	60·2	60·5	59·7	58·0	59·6	60·3	59·4
18 q	60·2	59·9	63·0	59·0	58·6	58·3	56·9	57·6	59·6	60·6	62·0	63·5	62·9	62·1	60·8	60·0	59·9	60·5	60·6	60·1	60·0	59·9	59·8	59·7	60·2
19 q	59·6	59·8	60·0	60·1	60·1	59·7	59·6	59·2	59·2	59·9	61·7	63·5	64·0	64·3	61·6	60·6	60·9	61·5	62·1	61·6	61·1	60·6	58·0	57·6	60·7
20	58·8	59·4	59·2	58·3	57·9	57·3	57·6	57·5	58·2	60·0	62·7	65·9	67·4	65·4	67·6	66·0	64·3	59·8	62·6	60·6	59·9	59·2	59·1	59·5	61·0
21	51·1	55·8	52·7	49·7	45·7	50·8	56·9	57·0	59·3	59·8	60·7	61·5	62·9	65·7	64·5	62·0	60·8	60·1	59·1	60·5	60·4	59·8	56·5	57·4	58·0
22	59·6	58·1	56·5	56·0	52·8	54·8	55·6	56·6	58·1	59·3	61·5	63·5	66·2	64·8	65·5	64·4	64·5	65·5	68·7	65·8	63·3	58·3	59·1	58·2	60·7
23 d	48·5	51·6	53·6	54·6	53·6	53·1	55·4	57·8	58·7	60·6	61·1	61·9	63·7	70·2	77·2	77·8	78·6	69·2	71·0	78·6	58·6	59·6	37·3	55·4	61·2
24 d	55·4	68·0	53·1	50·7	52·8	53·2	56·3	58·4	61·8	63·5	61·5	64·9	64·8	63·7	63·3	62·3	61·5	58·9	62·0	61·7	60·4	60·4	54·9	58·6	59·7
25	62·5	66·3	54·7	51·6	52·6	53·5	55·9	57·1	57·3	58·3	58·7	59·8	60·8	61·5	61·9	61·7	60·6	59·0	60·4	62·5	41·8	55·4	54·6	40·8	57·1
26	55·6	58·6	57·8	56·9	57·0	57·6	57·8	58·5	57·9	58·4	59·0	60·5	61·5	62·9	62·4	61·5	60·9	60·4	60·3	61·0	60·8	59·4	54·8	55·1	59·0
27	55·6	56·9	57·5	57·5	55·1	54·0	55·9	57·1	57·8	59·0	61·0	63·4	65·5	65·1	64·1	64·9	65·6	68·2	66·0	67·6	57·0	53·1	54·5	51·7	59·8
28 d	53·6	53·1	55·8	56·4	46·0	48·7	53·5	55·2	56·7	59·3	63·8	65·3	70·1	73·8	71·9	66·2	71·7	59·3	57·9	56·9	58·0	60·1	57·3	60·3	59·6
Mean	57·9	59·5	58·2	57·3	*56·4*	57·1	58·3	59·0	59·5	60·8	61·9	63·2	64·3	*64·6*	64·4	62·6	61·9	61·1	60·6	61·4	58·6	58·2	56·5	57·6	60·1

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

10 LERWICK (V) — 46,000γ (0·46 C.G.S. unit) + — FEBRUARY 1942

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	900	899	900	900	899	897	895	894	894	894	894	894	893	895	900	901	900	899	899	900	903	909	902	897	898
2	890	896	896	890	889	886	890	889	892	896	897	904	907	912	921	938	943	931	918	911	907	904	901	896	904
3	897	892	898	896	895	896	899	895	897	899	900	901	901	904	908	908	908	909	909	904	903	900	899	899	901
4	899	900	900	901	902	902	901	900	900	900	897	897	899	900	905	908	906	907	906	908	905	901	898	897	902
5 d	899	902	901	900	902	892	868	870	873	883	894	915	915	921	942	956	963	987	963	945	928	924	914	906	915
6 d	901	886	842	857	852	882	889	897	901	902	907	930	941	931	931	960	993	981	1027	1003	889	839	815	804	907
7	825	830	823	873	896	908	908	908	910	910	914	915	910	911	913	915	915	913	911	911	911	910	911	903	898
8 q	899	901	903	901	900	903	904	903	900	899	900	903	901	900	904	905	907	905	905	906	907	908	903	898	903
9 q	905	904	905	903	901	901	901	903	904	904	904	902	902	900	902	910	910	906	906	905	905	904	903	904	904
10	902	902	901	900	900	900	899	899	895	893	895	899	904	913	906	904	913	927	917	934	928	921	917	902	907
11	907	908	907	906	902	899	899	893	894	895	899	900	901	905	907	913	923	936	952	988	956	931	922	914	915
12 q	910	909	907	911	906	905	904	904	903	904	907	908	909	908	907	905	902	901	900	900	901	902	904	904	905
13	902	906	908	886	892	895	894	895	895	900	902	904	904	906	906	903	902	900	900	899	900	903	904	902	900
14	902	903	902	901	900	897	896	895	895	895	895	896	900	901	906	919	915	907	902	899	902	906	902	869	900
15	846	854	879	894	895	891	881	869	877	880	887	894	907	908	909	909	909	914	962	968	926	910	907	891	899
16	893	868	890	894	898	897	890	894	893	890	889	895	902	908	916	921	912	909	907	908	909	912	907	904	900
17	902	902	871	859	868	877	888	891	891	890	893	893	896	901	903	905	907	906	904	902	905	904	900	898	894
18 q	900	901	900	895	900	893	890	888	891	893	894	897	900	902	903	904	903	903	903	902	901	900	898	898	898
19 q	898	898	900	901	901	902	902	902	901	900	898	896	896	897	900	901	901	902	902	900	900	901	898	902	900
20	900	900	901	900	901	900	902	902	903	904	899	895	894	893	899	911	919	925	923	920	928	928	920	901	907
21	877	889	891	881	879	889	889	896	894	898	903	901	900	905	900	901	902	905	910	907	907	909	907	903	898
22	885	858	867	882	882	883	886	891	893	893	892	891	891	893	895	901	907	913	924	945	959	955	924	907	901
23 d	895	870	890	888	871	881	887	890	894	894	895	897	897	899	923	1046	1084	1069	1041	989	939	844	749	824	915
24 d	882	810	773	835	884	894	901	902	917	916	909	907	905	908	910	921	929	941	923	923	920	927	926	896	898
25	851	809	834	867	886	890	896	902	904	904	907	907	904	901	905	912	915	924	917	923	922	896	901	870	*894*
26	863	889	899	900	893	890	894	901	905	907	910	909	909	908	908	907	907	910	910	918	924	919	891	879	902
27	887	900	905	905	896	896	898	900	898	898	898	898	901	904	907	907	913	922	958	956	923	970	955	888	912
28 d	826	880	901	883	881	894	896	899	904	898	894	896	907	903	952	1031	1100	1082	970	943	923	912	907	900	*924*
Mean	887	*885*	885	890	892	894	895	895	897	898	899	902	903	905	910	922	929	*930*	927	926	915	909	899	891	904

Corrections to be applied to all values: H, -6γ; D, $-4{\cdot}2'$; V, -10γ.

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

11 LERWICK — FEBRUARY 1942

	TERRESTRIAL MAGNETIC ELEMENTS												3-hr. range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination			Vertical force							
	Maximum 14,000γ +		Minimum 14,000γ +		Range	Maximum 11° +	Minimum 11° +	Range	Maximum 46,000γ +		Minimum 46,000γ +		Range			
	h. m.	γ	γ	h. m.	γ	h. m. ′	′ h. m.	′	h. m.	γ	h. m.	γ	γ			°A.
1	12 52	417	386	23 30	31	12 52 66·3	57·2 23 3	9·1	21 30	910	889 24 0		21	1,0,0,1,2,1,1,1	7	0	73·7
2	5 12	420	350	8 48	70	12 41 71·2	51·1 16 10	20·1	15 54	949	883 5 23		66	1,2,3,3,3,3,1,2	18	1	73·5
3	7 36	405	373	2 2	32	3 9 65·4	55·8 18 8	9·6	17 58	910	887 1 27		23	2,2,2,1,0,2,2,1	12	0	73·8
4	22 56	411	380	10 58	31	13 3 65·7	57·8 8 45	7·9	15 8	909	894 23 13		15	0,0,0,1,1,0,1,1	4	0	73·8
5 d	18 17	503	358	11 54	145	13 58 73·2	21·9 18 23	51·3	17 19	1025	866 6 4		159	2,3,3,3,2,4,5,2	24	1	74·0
6 d	19 40	481	268	22 51	213	23 36 74·0	28·9 19 51	45·1	18 37	1048	780 23 28		268	4,4,2,3,3,4,5,5	30	1	74·1
7	13 8	404	341	0 18	63	1 58 76·3	53·7 3 0	22·6	11 5	917	795 0 3		122	4,3,1,2,2,1,0,1	14	1	74·6
8 q	23 1	403	379	11 57	*24*	11 46 63·1	53·5 23 19	9·6	16 5	910	894 23 11		16	1,1,1,1,1,1,0,2	8	0	75·0
9 q	22 5	404	377	10 0	27	11 50 66·8	55·9 0 0	10·9	15 58	911	897 13 25		14	1,0,0,1,2,1,0,0	5	0	74·9
10	23 25	420	367	13 10	53	18 34 66·4	47·9 17 16	18·5	19 53	938	889 9 14		49	0,0,1,1,2,3,2,3	12	1	74·2
11	15 51	401	348	21 41	53	12 50 67·8	47·0 21 20	20·8	19 44	1001	892 8 15		109	2,1,2,0,1,2,3,3	14	1	73·8
12 q	19 43	405	377	3 27	28	11 44 62·6	57·8 5 42	*4·8*	3 24	915	897 19 44		18	1,1,0,1,0,0,0,0	3	0	73·5
13	6 57	411	363	2 29	48	2 47 68·4	57·8 8 0	10·6	2 26	915	881 3 37		34	3,2,1,1,1,1,1,0	10	0	74·0
14	14 20	412	348	24 0	64	11 31 66·7	45·0 22 14	21·7	15 47	922	846 23 43		76	0,0,0,1,2,1,1,3	8	0	73·9
15	23 40	429	339	0 13	90	12 9 68·1	45·7 0 38	22·4	18 53	1002	833 0 37		169	3,2,2,2,2,1,4,3	19	1	73·6
16	1 5	410	376	15 3	34	1 10 70·8	36·4 22 7	34·4	15 6	923	858 1 22		65	3,1,1,2,2,1,1,4	15	1	75·0
17	3 3	406	375	3 52	31	2 14 65·0	48·8 4 35	16·2	20 26	908	850 3 14		58	3,2,2,1,2,1,1,2	14	0	75·0
18 q	6 52	405	379	2 31	26	2 34 65·5	56·5 7 14	9·0	15 52	905	886 6 54		19	2,1,1,1,1,1,0,0	7	0	75·5
19 q	13 58	414	385	10 4	29	13 21 66·4	55·5 22 55	10·9	18 42	905	894 13 27		*11*	0,0,0,1,2,1,1,2	7	0	75·9
20	23 41	422	373	9 42	49	14 50 69·0	55·3 5 50	13·7	17 24	935	876 24 0		59	0,1,1,2,2,3,2,3	14	0	76·1
21	17 47	401	341	13 49	60	13 41 71·0	44·6 4 3	26·4	13 46	916	869 0 32		47	3,3,2,1,3,1,1,2	16	1	76·1
22	18 9	409	372	0 46	37	18 33 70·9	52·0 4 26	18·9	21 0	973	852 1 26		121	3,1,2,1,1,2,3,3	16	1	76·0
23 d	16 56	*1044*	121	20 56	*923*	21 13 *108·6*	*15·5* 22 8	*93·1*	15 59	*1164*	*631* 21 11		*533*	4,2,2,1,4,7,8,6	34	2	75·7
24 d	22 52	434	*-95*	1 34	529	1 40 85·4	41·0 22 50	44·4	17 34	947	745 1 56		202	7,4,3,3,2,2,2,4	27	2	75·0
25	20 35	461	330	0 56	131	1 21 69·9	25·0 20 25	44·9	20 18	962	797 1 29		165	4,2,1,1,2,3,5,4	22	1	75·0
26	16 32	400	343	0 6	57	13 20 63·2	50·1 22 41	13·1	20 25	925	839 0 0		86	3,1,1,1,1,1,1,3	12	0	74·8
27	19 36	468	334	24 0	134	19 42 79·0	45·5 23 34	33·5	21 24	986	805 24 0		181	2,2,1,1,1,2,4,5	18	1	75·0
28 d	16 44	738	280	12 14	458	16 54 78·4	44·7 4 30	33·7	17 7	1149	805 0 0		344	4,3,2,3,6,6,4,3	31	2	75·0
Mean	- -	455	331	- -	124	- - 70·9	46·7 - -	24·2	- -	956	847 - -		109	1·9	14·7	0·64	74·7

q denotes an international quiet day and d an international disturbed day.

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

12 LERWICK (H) — 14,000γ (0·14 C.G.S. unit) + — MARCH 1942

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1 d	361	356	367	374	376	381	385	257	7	362	452	411	478	521	476	429	404	422	511	409	459	536	409	147	387
2 d	−163	−123	122	227	309	328	349	365	351	357	370	377	378	435	449	428	462	415	418	397	370	376	382	384	*323*
3 d	364	353	313	324	310	359	359	289	267	310	358	375	400	410	458	512	551	450	363	375	375	365	350	356	373
4	358	324	322	332	324	368	365	355	354	341	355	357	374	378	397	391	397	402	395	392	408	394	389	389	369
5 d	376	376	379	381	384	341	348	371	369	363	361	367	356	375	389	417	435	643	736	419	165	261	355	363	389
6	352	258	247	245	283	345	362	359	366	345	348	371	380	372	375	401	391	385	382	385	386	388	396	393	355
7	390	384	389	388	392	391	392	388	383	381	378	359	367	377	386	397	400	401	406	407	414	404	398	397	390
8 d	375	324	184	218	358	366	348	367	370	371	367	373	379	390	392	392	423	439	453	414	405	358	295	303	361
9	238	141	164	73	284	365	392	384	390	385	375	368	381	385	401	417	415	395	399	403	388	362	344	350	342
10	383	379	371	375	381	377	386	390	386	381	378	374	375	387	396	401	411	389	391	412	404	404	398	396	389
11	386	332	351	382	366	359	399	399	387	379	369	368	374	380	388	389	389	390	392	393	393	393	399	396	381
12 q	392	388	388	392	395	399	402	400	392	385	381	381	383	383	389	397	400	400	404	402	402	404	399	406	*394*
13	393	378	379	343	363	397	400	395	383	353	352	349	374	368	411	388	383	392	401	392	393	409	419	390	384
14	392	381	385	385	385	397	392	330	321	370	371	361	350	361	384	389	395	394	395	396	397	392	386	362	378
15	387	389	393	393	396	395	392	387	381	374	369	371	386	388	383	397	394	406	378	391	395	396	397	397	389
16 q	396	395	394	394	395	398	399	392	384	377	370	367	374	379	386	387	392	394	398	401	396	399	395	392	390
17	390	377	383	385	395	405	398	386	383	380	372	372	379	383	388	393	401	402	402	403	401	390	394	393	390
18	392	391	392	392	392	393	394	393	387	375	380	371	377	386	387	418	398	399	398	407	398	371	414	404	392
19	393	392	391	394	390	387	384	389	385	383	369	377	387	379	405	423	457	430	427	406	380	345	357	277	388
20	105	311	278	326	377	382	389	374	358	361	355	361	367	375	392	395	391	398	393	397	397	399	399	400	362
21	401	401	385	385	403	406	375	344	330	341	369	374	385	383	381	391	413	455	414	409	391	380	383	386	387
22	341	266	281	361	345	364	372	371	371	366	347	345	352	367	389	400	397	400	412	408	404	398	389	383	368
23	387	380	371	372	385	395	393	389	379	368	361	357	367	374	395	411	406	404	398	410	420	401	394	388	388
24	391	387	387	384	375	386	390	389	380	367	359	354	356	357	380	376	388	398	405	405	403	402	400	398	384
25 q	392	397	390	394	397	398	399	397	387	374	365	360	358	357	376	396	380	395	401	404	402	402	401	399	388
26	400	398	398	401	402	402	407	411	396	367	327	341	400	414	362	377	406	406	408	411	401	397	396	399	393
27 q	395	398	396	377	388	390	392	385	374	362	354	347	350	366	374	388	392	394	400	399	400	394	391	387	383
28 q	392	392	395	396	392	392	392	388	382	371	361	358	365	364	380	388	394	398	402	408	408	407	406	404	389
29	405	410	411	409	395	413	408	398	395	379	361	360	360	385	387	377	384	399	401	403	401	399	402	405	394
30	398	398	398	391	394	401	404	405	396	378	368	360	362	383	383	376	416	422	406	395	389	392	393	393	392
31	392	390	390	393	396	392	397	397	393	373	367	353	352	365	377	392	400	402	408	411	411	392	392	398	389
Mean	353	*346*	348	354	372	383	386	376	361	367	367	365	375	385	394	401	409	414	*416*	402	392	391	388	375	380

Corrections to be applied to all values: H, −6γ; D, −4·2′; V, −8γ.

MAGNETIC DECLINATION (WEST)

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

13 LERWICK (D) — 11° + — MARCH 1942

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1 d	63·3	62·1	58·5	57·9	56·6	56·4	55·8	87·2	61·4	2·0	55·7	31·8	46·6	62·9	73·6	64·3	69·9	70·9	65·4	44·3	50·0	67·6	64·7	67·8	58·2
2 d	63·4	8·5	27·3	52·2	55·5	61·1	60·4	55·8	53·9	53·6	55·5	54·5	53·6	52·7	57·5	54·7	53·0	55·4	53·6	58·7	60·3	61·1	63·2	64·1	*53·7*
3 d	63·8	69·0	73·3	67·3	68·7	60·5	62·4	63·9	68·5	52·5	48·7	60·4	59·8	55·8	50·8	49·6	54·0	52·4	58·8	59·8	58·5	58·7	60·1	54·7	59·7
4	59·6	57·4	54·7	55·3	55·0	54·7	57·6	60·4	64·2	61·7	61·4	63·7	63·9	64·7	63·4	63·7	62·9	48·0	56·5	60·8	56·5	56·5	55·6	56·5	59·0
5 d	57·3	57·8	57·5	57·1	59·5	67·6	70·7	69·7	65·4	62·6	64·6	65·8	67·2	65·8	64·6	65·2	65·4	51·1	63·4	76·3	61·0	49·6	43·5	57·2	*61·9*
6	58·8	64·1	61·2	66·3	69·3	57·3	59·8	64·3	64·0	61·7	62·9	61·2	64·3	64·9	62·9	54·6	59·3	58·3	58·9	58·7	58·6	58·5	58·3	56·8	61·0
7	57·3	56·8	56·7	53·2	53·3	53·4	55·2	58·9	60·3	60·8	61·6	62·5	62·4	63·8	67·3	60·7	54·3	53·9	56·5	58·4	61·6	61·4	56·8	55·6	58·4
8 d	55·5	46·4	38·7	59·9	52·2	52·1	57·5	58·8	57·8	56·2	57·3	59·2	61·0	62·2	63·1	63·2	62·3	60·5	58·7	62·9	52·0	51·4	55·5	54·6	56·6
9	56·0	61·0	35·7	39·1	39·0	52·0	54·2	54·2	56·9	60·2	62·7	63·8	65·3	66·3	65·6	66·7	65·4	56·7	56·5	52·6	54·2	53·7	55·0	50·7	56·0
10	55·4	58·0	57·2	54·7	53·3	55·6	56·9	56·6	57·1	58·7	61·2	64·8	64·2	66·3	66·2	65·3	64·6	63·3	60·6	62·7	61·7	60·5	59·4	57·7	60·1
11	55·4	64·0	53·1	51·8	49·4	58·5	56·5	58·0	57·7	59·7	60·3	62·1	63·0	63·2	62·5	60·6	59·5	58·7	58·2	57·9	58·9	59·0	59·3	61·7	58·7
12 q	58·7	60·5	58·6	56·4	56·6	56·6	57·5	57·5	58·6	59·1	60·7	62·7	64·1	64·3	63·4	62·5	61·4	60·6	59·9	60·2	60·1	60·2	59·6	53·7	59·7
13	52·4	53·5	47·7	52·8	58·0	53·7	55·4	56·4	57·1	61·7	63·6	68·4	69·3	73·3	69·3	70·4	67·4	62·3	61·7	58·9	59·6	53·5	52·8	56·4	59·8
14	57·4	60·7	60·2	56·0	58·1	57·9	58·7	67·9	80·3	68·0	62·6	65·3	63·9	62·5	66·3	59·4	59·1	59·2	57·4	57·2	58·3	57·1	57·8	65·2	61·5
15	51·0	57·7	56·5	56·5	56·7	56·5	56·3	57·2	57·1	58·9	60·5	63·2	66·6	67·3	61·4	62·6	61·4	59·6	55·4	59·2	59·8	59·2	57·2	57·6	59·0
16 q	61·7	58·8	57·8	57·7	58·0	58·1	57·9	59·1	58·4	57·5	60·2	63·1	64·3	63·8	62·0	60·2	59·5	58·9	59·5	54·4	55·7	58·1	58·7	58·9	59·3
17	58·8	64·1	59·6	56·2	58·3	56·7	58·0	58·3	58·1	59·2	61·2	63·8	64·2	62·7	60·9	60·0	59·7	60·0	59·6	61·1	62·1	56·8	57·3	58·4	59·8
18	57·8	58·1	57·8	57·6	57·3	56·9	56·8	57·2	59·7	64·8	65·5	66·0	66·1	68·4	67·9	69·1	69·4	64·4	59·5	57·4	52·4	50·2	55·3	59·3	60·6
19	55·1	56·6	55·2	54·8	53·7	54·9	57·4	55·6	54·5	57·3	58·6	63·6	67·6	68·3	69·1	70·1	70·8	70·9	66·1	59·3	56·1	56·8	54·7	36·6	59·3
20	45·7	45·8	50·2	52·8	45·5	53·3	56·4	56·5	56·7	58·5	60·7	62·8	64·7	66·0	64·4	62·8	60·8	59·9	57·7	58·1	57·8	58·9	59·0	59·0	57·3
21	59·1	57·8	61·2	57·8	51·5	56·4	58·7	60·4	66·4	64·1	65·5	68·6	70·4	68·8	65·8	64·7	61·4	47·6	61·3	56·3	53·7	54·5	51·7	49·6	59·7
22	50·1	55·6	57·7	56·8	51·5	60·5	55·2	55·1	55·2	57·2	61·7	63·4	66·8	67·3	65·4	65·5	64·0	61·1	50·9	54·9	58·3	57·9	56·7	60·8	58·7
23	58·8	55·5	58·5	59·4	58·3	57·3	56·8	55·6	55·5	58·0	60·3	63·4	66·7	67·4	66·2	68·1	64·6	64·4	64·3	63·8	50·4	57·4	53·1	56·7	60·0
24	56·5	55·7	55·7	54·5	59·1	57·4	56·5	55·2	54·3	56·7	58·9	62·4	64·7	64·5	65·6	61·7	59·9	59·9	59·5	59·5	59·9	60·0	58·6	57·4	58·9
25 q	60·2	57·5	56·2	56·1	56·0	56·5	56·8	55·6	55·1	56·0	59·3	63·5	65·8	65·7	64·5	62·4	59·0	58·2	58·6	58·9	59·1	59·5	59·0	59·1	59·1
26	59·0	58·9	58·4	57·5	57·4	57·5	56·3	55·0	51·5	51·1	59·8	64·2	70·6	74·0	74·7	73·0	72·7	65·4	64·0	63·7	62·1	60·6	59·3	58·9	61·9
27 q	57·5	57·5	58·2	65·3	58·6	56·6	54·7	53·5	53·1	55·1	59·1	62·4	65·7	67·0	64·8	62·3	60·5	60·2	60·0	58·5	53·0	53·6	55·6	60·6	58·9
28 q	60·4	60·2	57·1	57·0	57·7	58·1	57·3	55·7	55·2	55·0	56·4	60·1	64·2	64·3	64·1	62·8	61·6	61·0	60·1	60·2	60·3	60·0	59·7	59·2	59·5
29	58·9	58·5	57·0	58·4	61·3	57·2	54·9	56·7	55·7	58·3	59·5	62·3	66·7	68·7	70·7	65·0	61·6	60·2	59·5	59·7	54·8	55·8	58·2	58·1	59·9
30	56·9	58·5	58·5	58·0	57·1	57·1	58·5	57·4	55·6	56·6	57·5	60·5	63·8	68·1	66·8	64·6	66·0	54·2	57·0	56·9	58·7	56·5	54·4	58·7	59·1
31	59·0	58·5	57·5	57·6	58·4	59·1	55·2	54·7	55·2	55·8	58·0	61·6	67·2	67·3	64·9	61·7	59·6	59·0	58·9	58·3	53·4	56·2	58·9	59·3	59·0
Mean	57·4	56·6	*55·3*	56·6	56·2	57·0	57·5	59·0	58·7	56·7	60·0	62·0	64·3	*65·4*	65·0	63·1	62·3	59·2	59·3	59·0	57·4	57·4	57·1	57·4	59·2

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

14 LERWICK (V) — 46,000γ (0·46 C.G.S. unit) + — MARCH 1942

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1 d	866	888	898	904	906	906	910	928	971	1141	1029	1040	1046	1051	1032	1009	964	967	1004	986	993	1014	834	770	*961*
2 d	475	359	568	646	825	855	881	906	921	924	922	925	936	948	960	971	960	969	952	933	924	912	906	903	*853*
3 d	897	868	818	826	831	843	890	916	912	957	1011	982	976	1014	1008	1046	1076	1017	973	939	925	914	876	874	933
4	901	869	850	872	857	885	901	911	912	916	918	922	919	923	935	934	937	961	945	934	909	879	891	880	907
5 d	875	895	906	912	906	881	823	850	875	895	899	904	914	916	918	918	945	1025	955	904	767	831	839	870	893
6	900	828	777	737	741	819	862	879	894	925	932	934	937	931	942	946	929	924	918	915	915	911	906	903	888
7	901	897	896	897	901	902	900	897	898	897	899	910	914	913	916	940	944	939	925	917	914	933	912	903	911
8 d	877	787	729	635	814	866	876	865	877	887	898	901	912	917	925	940	960	1014	1030	965	893	871	847	813	879
9	790	604	635	581	701	851	895	903	901	906	907	914	911	912	916	928	951	1003	979	979	955	911	772	787	858
10	866	885	882	886	882	895	902	906	908	909	910	914	910	900	903	920	930	948	939	916	917	914	915	908	907
11	903	824	826	838	865	846	844	870	887	894	898	906	906	908	909	912	912	912	911	911	910	911	904	896	888
12 q	895	894	892	897	896	893	892	895	897	902	901	900	901	903	903	902	903	904	904	905	908	908	910	895	900
13	847	777	841	817	766	836	870	885	892	903	901	909	926	972	982	952	939	938	972	959	939	913	811	876	893
14	900	873	855	881	892	889	891	897	872	869	889	907	935	935	935	956	940	924	923	914	911	911	892	808	900
15	841	885	899	905	903	901	900	901	901	904	906	901	900	918	932	916	910	918	942	918	908	907	906	904	905
16 q	899	900	906	907	907	904	903	904	902	903	904	903	904	907	911	913	911	913	911	913	912	906	905	907	906
17	907	899	876	897	898	895	898	903	902	900	900	900	901	908	913	914	912	913	914	913	895	874	898	901	901
18	905	907	909	909	909	907	906	902	898	896	889	890	890	898	918	933	993	1006	993	953	931	912	866	856	916
19	887	902	908	909	907	902	901	903	904	896	893	884	887	891	902	925	975	1044	1010	1003	960	905	848	799	914
20	712	740	777	773	820	860	882	905	915	910	906	904	899	898	905	910	914	920	925	919	919	910	906	904	876
21	902	899	890	836	842	860	870	880	881	882	904	909	908	911	908	920	957	983	971	958	888	854	877	877	899
22	857	790	811	852	845	851	877	906	916	918	919	917	907	911	926	924	926	926	929	913	910	916	910	885	893
23	867	882	882	877	884	898	908	913	914	913	912	911	907	904	913	926	955	952	958	946	915	871	897	893	908
24	893	902	907	906	894	867	879	892	898	904	907	905	901	907	915	929	925	915	910	911	911	910	910	910	905
25 q	904	894	901	904	904	905	905	907	909	910	906	903	901	900	905	913	921	913	909	909	909	908	906	906	906
26	904	904	902	901	902	902	903	901	899	902	907	905	901	927	958	941	935	954	935	923	921	916	913	909	915
27 q	910	906	903	881	854	876	893	903	907	907	906	903	906	907	910	913	912	911	909	914	912	907	902	901	902
28 q	899	900	904	904	903	899	900	904	904	907	906	901	902	907	905	905	903	902	902	901	902	903	904	905	903
29	906	903	903	901	896	871	881	888	888	896	897	894	898	907	944	958	938	915	912	908	911	911	906	899	905
30	904	904	901	902	901	901	896	896	898	904	907	902	898	899	924	934	941	980	966	944	930	911	907	904	915
31	909	912	912	911	906	901	899	899	899	905	904	904	903	907	911	915	913	912	905	907	912	914	909	905	907
Mean	868	*848*	854	852	866	880	888	897	902	912	912	913	915	921	929	934	940	*949*	943	930	914	905	887	879	902

Corrections to be applied to all values: H, -6γ; D, $-4{\cdot}2'$; V, -8γ.

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

15 LERWICK — MARCH 1942

	TERRESTRIAL MAGNETIC ELEMENTS												3-hr. range indices *K*	Sum of *K* indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination				Vertical force						
	Maximum 14,000γ +		Minimum 14,000γ +		Range	Maximum 11° +		Minimum 11° +		Range	Maximum 46,000γ +		Minimum 46,000γ +		Range				
	h. m.	γ	γ	h. m.	γ	h. m.	′	′	h. m.	′	h. m.	γ	γ	h. m.	γ				°A.
1 d	22 30	722	−150	8 3	872	7 53	*151·5*	*−38·5*	9 33	*190·0*	9 26	*1248*	639	22 34	609	3,2,8,7,6,5,6,8	45	2	75·2
2 d	16 35	501	*−442*	1 54	*943*	0 30	90·7	−19·7	1 44	110·4	15 5	953	*239*	1 50	*714*	8,6,3,3,4,4,3,2	33	2	74·9
3 d	16 15	650	224	8 13	426	2 26	78·2	31·5	17 5	46·7	16 24	1130	791	2 48	339	4,4,4,4,4,6,4,3	33	2	74·5
4	20 34	436	295	1 58	141	8 37	66·1	40·7	17 27	25·4	17 20	971	830	2 18	141	3,3,3,3,2,4,4,2	24	1	74·5
5 d	18 25	*891*	26	19 50	865	18 51	109·1	16·4	20 30	92·7	17 28	1081	677	20 41	404	2,4,4,2,3,6,8,6	35	2	75·0
6	15 33	415	172	4 2	243	4 32	79·9	51·0	2 59	28·9	15 18	953	719	3 22	234	5,5,3,4,3,3,0,2	25	1	74·2
7	20 36	427	336	11 21	91	14 50	68·2	46·9	16 50	21·3	17 0	950	876	23 51	74	2,1,3,3,3,3,3,3	21	1	73·9
8 d	18 50	574	−122	2 50	696	19 14	79·2	26·0	20 3	53·2	18 50	1072	558	3 20	514	7,6,3,2,2,4,5,4	33	2	74·0
9	14 59	431	−40	3 27	471	1 30	80·8	14·1	2 47	66·7	17 22	1011	472	3 23	539	6,7,3,2,3,4,3,5	33	2	74·0
10	16 58	450	359	11 34	91	14 10	67·9	47·6	0 0	20·3	18 1	959	838	0 0	121	3.2.2.2.2.4.3.1	19	1	74·5
11	22 33	415	299	2 2	116	1 3	72·3	46·3	4 4	26·0	16 20	914	783	2 2	131	4.3.3.2.1.1.1.2	17	1	74·8
12 q	23 24	421	378	11 22	*43*	13 17	65·0	50·2	23 54	14·8	22 56	914	883	23 34	31	2,1,1,1,1,1,1,3	11	0	74·9
13	22 22	468	297	4 0	171	13 21	78·0	38·9	21 51	39·1	14 11	991	747	4 25	244	4,4,2,3,4,3,3,5	28	1	74·9
14	16 7	417	274	8 3	143	8 35	85·8	52·7	15 43	33·1	15 27	972	788	23 27	184	3,2,4,4,3,3,1,4	24	1	75·0
15	17 26	417	343	0 0	74	13 20	69·1	48·6	0 17	20·5	18 17	948	827	0 7	121	3,1,1,3,3,2,3,1	17	1	75·0
16 q	19 21	409	365	11 18	44	12 4	64·9	51·8	19 21	13·1	19 32	917	895	0 47	22	2,1,1,0,1,1,2,1	9	0	75·1
17	20 30	415	367	11 9	48	20 35	71·4	53·0	21 31	18·4	1 6	909	851	21 3	58	3,2,2,1,1,1,3,3	16	0	76·0
18	22 47	436	355	21 33	81	16 23	73·2	39·5	21 10	33·7	17 45	1019	844	23 6	175	0,0,2,2,3,4,4,4	19	1	76·1
19	16 46	474	190	24 0	284	17 31	75·2	26·2	23 52	49·0	17 47	1054	780	23 57	274	2,2,2,2,2,2,4,4,5	23	1	76·0
20	18 55	406	−49	0 27	455	0 54	66·7	27·4	0 3	39·3	18 18	928	596	0 47	332	7,4,2,2,1,2,2,0	20	1	75·9
21	17 46	464	325	8 26	139	20 4	72·1	36·5	17 10	35·6	17 4	1009	821	3 56	188	3,3,3,3,3,4,5,4	28	1	75·5
22	18 49	426	225	1 29	201	24 0	69·8	45·3	18 47	24·5	18 32	933	765	1 50	168	4,3,3,2,3,2,3,3	23	1	75·7
23	20 31	446	350	11 20	96	15 52	71·1	40·5	20 30	30·6	20 0	963	855	21 24	108	3,2,1,1,3,2,4,4	20	1	76·7
24	19 8	408	340	11 40	68	14 11	69·0	53·0	7 26	16·0	15 58	931	864	5 19	67	1,3,2,2,2,2,0,1	13	0	77·5
25 q	17 54	408	349	12 29	59	12 59	70·0	53·5	8 13	16·5	16 13	925	891	1 27	34	1,1,1,2,2,2,0,0	9	0	78·2
26	16 19	451	307	10 52	144	14 53	80·8	47·8	8 50	33·0	14 26	972	891	12 19	81	0,0,2,3,4,4,2,1	16	1	78·0
27 q	21 1	408	341	11 25	67	3 31	70·4	47·0	20 56	23·4	19 9	918	848	4 29	70	1,3,2,1,2,2,3,3	17	1	77·5
28 q	19 24	411	354	11 52	57	12 35	65·0	54·7	9 17	*10·3*	13 10	907	895	0 6	*12*	1,1,0,1,1,1,1,0	6	0	76·8
29	5 30	422	352	12 44	70	14 31	73·2	50·6	20 52	22·6	14 56	963	866	5 24	97	0,3,2,2,3,3,2,2	17	1	76·1
30	17 51	443	347	15 4	96	13 50	70·3	42·8	17 40	27·5	17 30	1004	893	7 3	111	1,1,2,2,3,4,3,3	19	1	76·0
31	20 50	430	340	12 12	90	12 57	70·1	43·9	20 44	26·2	15 37	917	896	5 39	21	0,1,1,2,2,1,3,3	13	0	76·5
Mean	− −	467	229	− −	238	− −	76·6	37·6	− −	39·0	− −	979	778	− −	201	2·7	21·5	0·97	75·6

q denotes an international quiet day and d an international disturbed day.

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

16 LERWICK (H) — 14,000γ (0·14 C.G.S. unit) + — APRIL 1942

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	401	404	398	402	395	407	419	413	398	385	375	375	377	382	368	386	392	397	401	398	404	400	405	404	395
2	403	403	402	402	404	412	408	392	372	359	372	363	375	408	392	422	483	458	436	429	381	367	387	382	401
3 d	371	388	381	385	287	363	349	337	333	353	360	368	379	401	378	413	397	392	395	414	411	389	414	392	377
4 d	389	382	356	381	392	408	327	290	391	360	341	350	373	388	416	510	752	654	422	317	160	380	370	351	394
5	362	366	368	359	353	375	381	377	372	350	347	346	348	363	392	372	376	395	392	392	387	391	396	380	373
6	379	389	376	371	379	389	391	384	376	363	351	350	362	372	380	386	392	396	398	398	393	403	393	394	382
7 q	392	386	389	391	392	389	394	393	385	371	363	355	353	374	381	392	399	400	396	397	398	400	396	398	387
8	396	394	341	323	400	404	412	388	356	371	368	359	358	377	401	388	428	439	430	407	395	392	392	398	388
9	395	390	385	386	385	384	391	389	383	374	372	359	382	374	401	398	400	407	405	403	399	409	405	397	391
10	396	395	395	393	393	393	393	388	380	368	359	355	359	366	375	389	396	407	410	412	414	414	398	376	389
11 d	333	245	193	278	323	334	384	364	310	326	326	344	333	404	447	429	389	394	387	384	381	384	383	385	353
12	385	387	388	388	388	389	387	384	378	365	359	349	354	362	382	395	383	393	395	402	396	398	394	394	383
13	397	393	392	390	392	390	389	388	379	363	352	345	367	434	441	482	468	430	418	389	392	370	227	235	384
14	-236	-193	-3	352	402	388	390	385	373	360	362	356	363	376	391	409	401	407	405	402	401	398	393	393	*320*
15	391	391	390	389	387	386	385	374	367	359	355	355	353	368	381	389	396	399	408	412	408	398	400	398	385
16	397	391	377	377	391	380	376	372	355	342	347	343	347	347	372	388	405	432	447	450	377	363	283	274	372
17 d	60	2	-41	102	358	389	311	321	349	327	346	389	374	397	423	468	498	456	448	422	420	405	411	393	335
18 d	383	364	350	348	381	367	343	336	344	334	319	334	343	452	471	481	414	420	449	402	396	389	340	320	378
19	380	364	317	347	372	384	388	384	372	354	336	345	350	363	379	380	402	426	421	423	408	392	393	390	378
20	364	379	364	384	382	389	393	388	375	363	361	362	351	364	365	408	418	411	412	411	405	402	397	398	385
21 q	393	389	382	387	389	387	386	382	372	357	346	346	356	372	388	392	390	405	423	411	406	398	398	396	385
22 q	395	397	393	395	395	394	393	389	378	362	353	350	357	368	381	386	398	403	407	409	409	409	406	405	389
23	405	405	406	405	407	413	407	405	399	379	362	353	378	320	380	409	432	479	463	431	405	397	382	363	399
24	285	273	353	395	398	399	400	387	372	357	353	355	370	380	378	391	404	423	424	410	405	399	401	395	379
25 q	391	388	386	388	389	386	383	375	369	358	348	345	354	369	381	389	398	407	412	410	407	403	401	399	385
26 q	398	395	389	383	388	388	390	388	380	367	360	351	359	373	385	388	396	408	409	413	410	408	407	405	389
27	405	405	401	398	397	395	390	387	381	371	372	374	379	385	410	423	432	470	482	453	408	401	401	362	*403*
28	223	98	218	376	364	379	382	374	370	363	357	359	367	385	393	400	403	409	408	405	405	407	417	396	361
29	386	388	386	382	382	386	384	373	369	363	364	366	373	383	391	396	400	401	405	405	403	407	408	395	387
30	400	397	395	395	397	398	396	397	390	380	373	375	392	360	403	404	399	425	428	414	408	403	406	406	398
Mean	347	*339*	341	368	382	388	384	377	371	360	355	356	363	379	394	409	421	*425*	418	407	393	396	387	379	381

Corrections to be applied to all values: H, -6γ; D, $-4{\cdot}2'$; V, -7γ.

MAGNETIC DECLINATION (WEST)

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

17 LERWICK (D) — 11° — APRIL 1942

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	57·4	57·0	55·6	55·3	56·4	58·4	54·6	54·4	53·1	56·2	58·2	61·3	65·4	68·1	63·2	61·8	60·7	58·7	58·1	58·7	54·5	58·6	58·5	59·5	58·5
2	59·3	60·6	59·2	58·7	58·6	56·5	56·8	58·3	61·0	64·8	65·0	65·9	66·8	73·1	70·6	70·1	64·3	69·7	59·7	51·7	54·0	48·5	51·4	56·4	60·9
3 d	57·1	56·0	58·4	57·6	68·2	72·6	68·8	68·3	62·3	64·5	64·3	65·6	66·9	69·8	65·4	62·6	61·6	59·3	57·9	59·2	58·7	51·2	43·1	53·8	*61·4*
4	55·4	55·3	49·6	48·7	54·0	52·5	62·8	77·2	61·8	58·8	58·3	60·5	73·4	76·9	77·3	73·3	68·4	72·6	56·3	48·9	59·5	49·5	50·7	59·2	60·9
5	58·5	57·9	57·8	58·0	61·3	56·9	54·9	54·6	54·5	55·6	56·4	60·6	63·9	64·1	63·2	63·4	60·7	57·5	57·4	56·5	57·1	58·2	59·9	58·3	58·6
6	55·0	56·3	54·5	58·4	59·2	56·5	56·4	54·5	53·6	54·8	57·2	59·7	62·5	64·4	63·8	62·4	60·6	59·5	58·5	57·7	57·4	57·3	55·5	55·4	58·0
7 q	56·2	56·6	55·5	55·7	55·6	56·1	56·7	56·1	54·9	54·7	56·5	60·3	63·3	65·3	63·9	61·8	60·7	60·2	59·7	59·4	59·1	58·6	54·6	52·8	58·1
8	53·5	59·1	55·3	33·5	44·3	52·4	53·2	58·3	65·5	65·6	60·6	61·8	66·2	69·9	70·0	69·1	65·5	60·2	48·4	49·4	54·4	56·5	58·6	57·4	57·9
9	58·3	55·7	56·2	55·4	54·9	55·4	55·5	56·0	56·0	56·5	58·4	60·4	63·5	65·7	63·7	58·4	58·8	60·3	60·2	59·7	57·5	52·9	55·3	58·1	58·0
10	58·4	57·1	57·0	56·8	55·9	55·4	54·3	53·5	53·6	55·0	57·6	60·3	63·0	64·6	63·7	62·3	61·4	61·1	61·0	60·5	60·6	59·7	54·2	44·3	58·0
11 d	48·4	35·4	43·9	29·3	41·0	54·2	50·7	52·3	60·3	66·9	63·2	63·2	69·7	64·6	64·7	63·4	62·6	62·2	58·8	59·8	57·3	54·4	58·5	57·7	55·9
12	57·6	58·1	57·4	56·9	56·0	55·2	53·8	52·4	53·4	55·3	59·5	62·6	65·4	66·1	66·0	64·5	61·4	58·7	57·9	57·4	55·6	57·9	59·3	60·1	58·7
13	62·8	58·7	56·6	56·5	56·0	54·9	54·6	53·1	51·7	54·4	57·9	63·4	66·6	71·4	71·7	67·3	63·4	60·4	51·6	57·7	48·3	51·4	53·5	47·6	58·0
14	26·8	41·0	52·3	53·2	52·9	56·7	55·5	49·0	49·6	51·9	55·6	60·1	64·2	64·6	63·3	63·2	61·4	60·4	59·4	59·0	58·5	58·1	57·9	57·8	55·5
15	57·5	57·2	56·9	56·5	55·6	54·8	53·5	53·3	54·2	54·9	56·3	60·3	63·4	65·4	64·4	62·6	61·2	59·5	58·6	57·9	58·1	58·5	58·4	58·4	58·2
16	58·4	58·4	58·6	59·2	51·6	50·7	53·1	53·0	57·4	61·8	60·6	64·2	67·4	67·5	65·1	63·0	61·5	61·4	60·4	61·9	62·2	48·5	48·7	42·7	58·2
17 d	29·5	17·9	16·4	38·2	41·3	46·7	51·0	59·6	57·5	60·8	63·0	64·5	66·3	71·0	73·2	66·5	67·5	67·6	67·3	62·4	59·6	57·7	53·2	50·6	*54·6*
18 d	56·0	51·6	54·7	56·8	56·4	56·5	58·2	61·2	58·6	56·2	59·5	64·2	68·2	68·5	67·8	68·3	63·8	63·4	51·6	60·7	57·4	57·4	62·7	58·8	59·9
19	53·5	48·7	53·3	54·6	55·0	53·2	56·0	54·5	54·0	54·7	56·5	59·8	64·9	66·2	64·7	63·4	62·1	61·8	60·3	56·4	54·2	56·8	57·6	58·5	57·5
20	58·0	54·8	61·9	57·8	56·6	55·3	53·6	53·5	52·5	54·6	57·5	62·0	66·5	68·3	66·1	65·8	60·9	57·6	59·8	57·9	57·0	58·3	56·8	57·5	58·8
21 q	57·8	58·5	58·8	57·1	55·3	54·4	53·2	53·2	53·6	54·7	57·2	59·8	63·0	63·8	63·8	62·6	60·8	60·0	60·2	58·3	57·4	57·5	58·1	58·0	58·2
22 q	57·6	58·0	59·3	56·2	55·2	54·3	53·6	53·1	52·7	53·3	56·2	59·6	63·4	65·7	65·7	63·5	62·3	60·9	59·9	59·5	59·4	59·1	58·6	58·3	58·6
23	58·1	57·9	57·1	56·0	54·7	53·2	52·5	50·8	51·0	54·0	59·6	63·3	70·0	69·0	69·4	68·4	64·2	55·3	52·0	51·4	56·4	58·6	61·4	55·1	58·3
24	61·6	60·0	65·3	56·6	55·3	54·5	54·1	53·0	54·7	56·4	59·5	62·8	65·1	66·3	64·1	61·4	59·7	58·5	58·6	57·5	59·4	59·1	57·9	58·4	59·2
25 q	58·4	57·5	56·3	55·3	53·9	52·5	50·8	50·9	51·9	54·6	56·7	59·8	61·8	62·2	61·4	59·8	58·7	58·1	58·0	59·0	59·7	59·5	59·1	58·4	57·3
26 q	57·8	57·6	56·5	55·5	54·2	50·7	50·1	50·7	52·6	54·3	56·7	59·3	62·0	62·5	61·7	60·1	60·2	59·5	59·0	59·1	59·1	59·0	59·3	57·4	57·3
27	58·0	57·6	56·6	55·6	54·5	53·5	53·5	53·5	53·6	57·6	60·4	62·3	63·2	63·6	64·4	62·7	64·5	67·9	65·3	57·6	57·5	54·3	58·1	60·4	59·0
28	36·5	15·9	52·9	52·7	52·3	48·2	48·9	51·5	54·8	57·8	60·4	62·4	64·1	65·1	62·1	59·6	60·3	60·3	59·8	59·4	59·7	59·4	55·1	55·6	54·8
29	57·3	59·1	57·9	56·8	54·2	53·3	53·6	54·5	55·3	56·5	58·2	61·0	63·1	62·7	61·4	60·5	60·0	59·5	59·6	59·4	59·4	59·3	55·4	54·3	58·0
30	53·7	55·4	54·6	54·1	53·5	53·0	53·5	53·8	55·5	56·1	57·4	61·6	67·1	69·4	69·3	65·3	63·6	62·8	58·6	59·2	59·5	60·4	60·0	58·1	59·0
Mean	54·5	*53·0*	54·9	53·8	54·5	54·6	54·6	55·3	55·4	57·1	58·8	61·7	65·3	*66·9*	65·8	63·9	62·1	61·2	58·5	57·8	57·6	56·5	56·4	56·0	58·2

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

18 LERWICK (V) — 46,000γ (0·46 C.G.S. unit) + — APRIL 1942

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	902	905	897	885	896	887	886	887	891	893	894	892	888	887	895	900	906	908	907	905	900	899	895	897	896
2	899	900	901	903	901	896	900	900	900	899	899	912	930	960	1009	1011	1044	1050	1060	979	913	849	862	861	*931*
3 d	776	868	889	874	802	716	789	828	851	858	875	890	891	906	936	950	922	913	914	906	904	901	856	865	870
4 d	869	850	832	858	893	893	878	833	838	875	900	970	961	932	933	993	999	1007	957	929	825	870	888	882	903
5	851	882	896	907	898	892	902	907	909	917	926	926	923	933	946	944	939	940	938	928	921	913	886	876	913
6	877	881	894	896	887	891	905	911	914	913	914	912	907	907	910	912	910	913	914	917	919	899	903	896	904
7 q	892	895	900	905	906	909	905	907	910	912	912	909	906	903	906	909	910	912	914	913	914	915	916	903	908
8	894	877	753	768	840	880	893	900	908	896	900	902	901	909	919	946	941	1008	1007	975	943	928	917	901	904
9	895	888	903	907	909	908	905	906	908	910	911	913	912	917	924	935	928	915	909	910	915	904	893	899	909
10	904	908	908	909	909	909	909	912	913	913	908	907	906	907	907	906	905	902	902	903	904	907	919	903	907
11 d	851	803	745	717	723	769	840	885	901	914	930	943	955	1008	1043	1049	977	960	950	935	924	917	912	913	899
12	919	917	915	917	915	911	910	909	911	912	910	912	912	914	921	934	935	934	925	919	924	915	913	899	917
13	867	897	908	913	913	910	909	909	911	909	906	904	903	909	955	999	1006	999	964	930	907	849	705	644	901
14	651	661	459	727	863	893	894	908	909	912	909	910	905	907	909	911	915	910	908	908	907	906	907	908	*858*
15	910	911	913	914	915	914	914	914	910	909	907	904	903	901	906	910	914	916	915	918	920	917	910	906	911
16	909	908	895	892	878	892	884	885	899	907	912	912	913	916	913	912	920	932	962	959	904	854	774	788	897
17 d	816	724	792	731	780	877	879	864	889	900	940	953	931	920	940	978	986	997	994	973	956	937	917	883	898
18 d	882	882	882	888	899	885	879	874	877	892	911	929	939	979	997	1010	992	964	905	900	924	888	812	762	906
19	791	824	825	819	852	872	879	888	902	911	917	906	903	910	914	918	916	923	942	941	928	920	911	899	892
20	869	866	859	869	895	900	909	911	912	915	907	900	904	911	910	913	942	953	927	926	923	914	902	893	905
21 q	897	904	907	907	910	914	915	913	910	909	907	902	893	891	895	908	915	913	914	923	920	917	910	908	908
22 q	907	903	900	897	904	907	906	905	902	899	894	888	882	881	883	892	897	903	904	904	905	904	905	905	899
23	904	903	901	901	900	899	900	895	890	888	888	889	889	943	927	954	997	991	960	937	931	920	896	802	913
24	789	726	772	846	881	884	893	897	894	903	908	909	902	911	923	920	921	921	923	921	913	909	907	907	887
25 q	908	910	911	913	914	915	914	912	910	909	906	906	901	901	902	901	904	908	910	909	906	908	908	909	908
26 q	909	909	910	910	903	900	900	901	899	901	903	903	900	898	903	904	903	902	906	906	907	906	906	906	904
27	907	906	908	909	907	906	904	901	900	896	894	894	896	902	907	920	929	955	992	979	961	922	909	824	914
28	699	602	706	829	860	882	895	899	901	905	911	911	906	911	928	930	921	911	906	906	902	904	885	884	871
29	897	901	904	905	900	899	896	899	901	905	906	903	899	899	901	903	905	906	904	903	903	903	897	886	901
30	889	904	909	911	907	902	900	896	895	892	890	889	899	907	909	929	947	949	965	940	922	913	904	902	911
Mean	864	861	*857*	871	882	887	893	895	899	903	907	910	909	916	926	937	938	*941*	937	927	915	904	887	874	901

Corrections to be applied to all values: H, -6γ; D, $-4{\cdot}2'$; V, -7γ.

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

19 LERWICK — APRIL 1942

	TERRESTRIAL MAGNETIC ELEMENTS																3-hr. range indices *K*	Sum of *K* indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination				Vertical force										
	Maximum 14,000γ +		Minimum 14,000γ +		Range	Maximum 11° +		Minimum 11° +		Range	Maximum 46,000γ +		Minimum 46,000γ +		Range					
	h. m.	γ	γ	h. m.	γ	h. m.	′	′	h. m.	′	h. m.	γ	γ	h. m.	γ					°A.
1	6 38	422	346	14 16	76	13 44	69·3	51·6	20 36	17·7	17 33	910	878	3 9	32	2,2,1,1,3,2,2,1	14	1	76·8
2	16 19	496	324	21 26	172	14 0	77·0	39·4	21 35	37·6	18 11	1080	786	24 0	294	1,2,2,3,4,4,5,4	25	1	77·5
3 d	19 32	449	196	4 40	253	4 49	85·0	26·2	22 16	58·8	15 27	959	659	5 3	300	5,5,4,3,3,3,3,5	31	1	77·2
4 d	16 35	*1028*	−343	20 15	*1371*	20 13	*130·1*	7·5	19 59	*122·6*	16 33	*1103*	592	20 8	511	3,3,5,4,3,7,8,3	36	2	77·3
5	17 39	409	336	10 13	73	13 11	66·2	54·0	8 34	12·2	14 10	949	836	0 26	113	3,2,1,2,3,2,1,3	17	1	77·0
6	21 10	419	345	11 8	74	13 34	65·0	53·2	8 48	*11·8*	20 6	922	873	0 0	49	2,2,1,1,1,0,1,2	10	0	77·0
7 q	21 10	404	344	12 25	60	13 35	66·0	51·6	23 13	14·4	22 16	921	889	0 40	32	1,0,1,1,2,1,0,2	8	0	77·0
8	16 57	486	270	2 57	216	14 51	73·2	26·7	3 30	46·5	17 20	1025	726	2 38	299	5,5,4,3,4,4,3,2	30	1	77·6
9	21 22	426	350	11 9	76	13 9	67·1	50·9	21 32	16·2	15 23	940	878	1 6	62	2,1,2,2,3,2,1,2	15	1	78·0
10	21 14	418	350	24 0	68	13 25	65·8	41·7	24 0	24·1	23 6	924	881	24 0	43	0,1,0,0,1,1,1,4	8	0	78·5
11 d	14 42	488	114	2 32	374	12 27	72·9	10·4	3 32	62·5	15 8	1100	684	3 57	416	6,5,4,3,5,4,3,3	33	1	78·6
12	15 11	419	342	11 12	77	15 7	67·5	51·9	7 34	15·6	15 35	941	882	23 55	59	0,1,1,2,2,3,1,2	12	0	78·8
13	15 43	502	132	23 52	370	14 33	73·9	33·7	20 47	40·2	17 43	1020	591	22 39	429	3,1,2,2,4,4,5,6	27	2	79·2
14	15 38	464	*-592*	1 2	1056	2 25	79·4	-11·0	0 33	90·4	16 10	924	*318*	2 11	*606*	8,6,3,3,3,4,2,1	30	2	79·3
15	20 0	416	350	12 42	66	13 39	65·9	51·9	7 31	14·0	19 50	921	900	13 18	21	0,1,1,1,2,1,1,1	8	0	79·2
16	19 57	471	231	24 0	240	20 34	70·3	35·1	23 56	35·2	18 32	976	737	22 38	239	2,3,3,2,2,3,5,5	25	1	80·0
17 d	16 16	514	-171	1 31	685	14 29	74·3	*-31·0*	2 1	105·3	17 38	1010	512	2 0	498	6,7,4,4,3,4,3,3	34	2	81·0
18 d	14 4	551	282	23 34	269	13 37	77·4	41·6	18 44	35·8	15 59	1039	733	23 2	306	4,3,3,3,5,5,4,5	32	1	82·2
19	19 16	445	283	2 35	162	13 20	67·7	46·8	1 45	20·9	18 56	953	775	0 0	178	4,3,2,2,2,3,3,2	21	1	83·0
20	16 5	426	340	12 37	86	13 26	69·9	51·6	8 34	18·3	17 17	964	847	2 44	117	3,3,1,2,3,3,2,2	19	1	83·0
21 q	18 31	426	344	11 18	82	14 46	65·0	52·5	6 32	12·5	19 48	928	889	13 22	39	1,0,1,1,2,2,2,1	10	0	83·0
22 q	19 42	411	348	11 19	63	14 8	66·1	52·5	8 12	13·6	4 8	908	880	13 11	28	2,1,0,1,1,1,0,0	6	0	82·5
23	17 8	512	304	13 11	208	15 12	73·5	42·8	19 15	30·7	16 48	1028	778	23 49	250	0,2,2,3,4,4,4,4	23	1	81·8
24	17 54	433	230	0 57	203	0 42	74·7	48·9	0 9	25·8	14 43	927	700	1 52	227	5,4,2,2,2,3,2,1	21	1	81·0
25 q	19 13	414	344	11 20	70	13 22	62·5	50·5	6 20	12·0	5 18	915	900	15 18	*15*	0,1,1,0,1,1,1,0	5	0	80·8
26 q	20 0	418	350	11 11	68	13 20	63·0	49·7	7 7	13·3	3 25	913	897	8 18	16	1,2,2,1,1,1,1,1	10	0	81·2
27	18 45	522	319	23 44	203	17 40	71·2	48·0	21 7	23·2	18 44	1012	679	24 0	333	1,1,1,2,2,4,4,6	21	1	81·5
28	22 12	440	-203	1 56	643	13 31	65·5	-7·4	1 35	72·9	15 3	937	489	1 45	448	7,4,3,1,2,2,1,3	23	2	82·1
29	22 14	416	361	9 55	*55*	12 35	63·5	50·4	23 0	13·1	17 24	908	882	23 56	26	1,1,1,1,0,1,0,3	8	0	82·9
30	18 33	437	346	13 21	91	14 20	71·3	51·6	6 25	19·7	18 18	976	882	0 2	94	2,1,2,2,3,3,3,1	17	1	83·4
Mean	− −	469	219	− −	250	− −	72·0	37·4	− −	34·6	− −	968	765	− −	203	2·4	19·3	0·83	79·9

q denotes an international quiet day and d an international disturbed day.

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

20 LERWICK (H) — 14,000γ (0·14 C.G.S. unit) + — MAY 1942

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	401	391	389	380	387	402	379	341	356	357	353	357	353	370	392	397	409	413	403	405	403	400	399	399	385
2	399	396	394	390	390	385	370	361	363	360	338	337	359	393	406	443	467	440	419	416	407	391	350	370	389
3	350	374	367	387	386	380	371	373	369	363	369	369	377	382	390	394	402	406	411	418	413	405	405	412	386
4 d	404	396	388	390	399	396	392	388	385	378	373	375	382	396	424	454	446	450	488	451	400	310	259	311	393
5 d	281	168	346	363	387	399	384	376	368	359	351	362	377	386	381	389	405	414	420	421	413	409	406	389	*373*
6	390	385	390	386	386	388	392	388	378	370	372	373	368	379	389	390	402	403	413	419	412	410	407	405	391
7	400	397	395	396	393	393	396	400	396	385	378	373	379	382	393	401	408	416	421	416	415	415	412	413	399
8	405	404	400	396	398	404	403	399	390	377	374	374	379	387	403	403	406	419	426	426	427	427	423	414	403
9 q	411	409	409	408	408	407	402	399	395	386	374	367	369	377	387	394	405	411	417	414	410	409	411	408	399
10	410	402	397	392	402	403	402	396	392	389	389	393	389	388	391	400	409	417	419	420	423	431	435	427	405
11	420	425	417	411	413	414	406	399	393	388	385	384	389	390	399	403	404	418	416	414	414	413	410	408	406
12 q	405	404	402	405	405	404	402	399	389	377	370	370	375	383	396	403	429	437	431	421	417	410	404	399	402
13 q	396	396	396	398	402	403	401	400	390	375	366	366	374	383	388	393	405	416	419	415	417	417	418	426	398
14 d	422	423	427	434	429	405	344	382	370	350	374	382	368	374	385	399	405	423	419	414	408	401	397	398	397
15	399	399	401	394	391	387	391	387	384	382	378	376	374	381	396	409	412	423	427	423	426	401	400	393	397
16	391	391	392	389	388	392	387	383	378	371	369	373	371	384	390	408	420	441	446	439	420	411	403	403	397
17	395	392	400	396	398	397	392	385	373	367	370	380	393	397	402	415	420	423	435	437	422	409	404	401	400
18	400	386	396	407	404	399	393	384	374	368	361	360	371	375	389	416	421	430	429	428	424	408	404	404	397
19	398	397	396	396	399	398	394	385	379	371	371	375	376	384	387	403	414	430	426	426	420	414	408	407	398
20	407	407	406	403	401	394	388	387	389	386	380	379	376	381	393	407	436	434	417	432	434	431	392	411	403
21	408	389	348	395	407	405	404	402	395	380	372	369	375	396	408	394	420	425	431	424	414	414	408	399	399
22	399	401	405	404	406	404	390	359	357	384	383	376	374	383	388	408	442	472	469	440	376	388	399	389	400
23	385	392	400	401	400	405	404	396	392	383	373	374	374	385	391	404	408	438	440	429	432	409	399	404	401
24	405	404	400	404	402	403	403	400	388	372	364	362	371	385	392	413	408	424	431	422	419	409	402	388	399
25	395	402	403	400	400	396	393	388	383	380	374	380	380	384	390	397	409	415	420	420	417	414	408	404	398
26 q	401	397	400	403	403	399	391	381	371	364	366	373	379	383	393	403	411	418	424	420	418	412	409	409	397
27 d	409	408	409	411	410	408	403	396	391	385	388	376	385	430	425	455	490	489	464	459	401	385	370	363	*413*
28	392	390	397	395	370	321	324	344	362	362	363	366	382	382	411	421	433	426	425	420	421	402	405	401	388
29	391	382	380	389	387	379	384	381	368	359	364	366	363	372	389	401	426	431	430	418	414	408	404	402	391
30	399	394	391	398	402	396	388	374	369	362	368	370	374	388	399	405	405	412	422	416	416	407	403	398	394
31 q	398	395	401	402	402	397	389	381	372	369	370	374	379	396	404	405	416	423	422	417	417	412	408	404	398
Mean	396	390	395	397	399	396	389	384	379	373	*370*	371	375	386	396	407	419	427	*428*	424	415	406	399	399	397

Corrections to be applied to all values: H, −6γ; D, −4·2′; V, −4γ.

MAGNETIC DECLINATION (WEST)

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

21 LERWICK (D) — 11° + — MAY 1942

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	56·8	55·8	53·4	50·5	47·6	49·3	52·8	53·1	58·2	55·9	57·5	61·7	64·5	64·6	64·1	63·2	61·6	61·3	59·9	59·5	57·9	57·3	57·0	57·2	57·5
2	57·3	56·5	56·1	56·2	55·3	53·2	56·0	56·7	57·1	58·3	59·9	65·4	67·3	68·4	68·6	67·2	69·6	67·1	62·5	61·4	58·1	57·3	55·1	50·7	*60·1*
3	54·4	52·1	53·8	53·1	54·4	54·5	55·0	53·5	54·5	55·2	57·5	60·5	61·5	62·0	62·7	62·6	62·4	61·1	60·5	59·7	58·7	56·6	56·3	51·7	57·3
4 d	53·9	54·8	55·7	55·0	53·6	53·4	51·6	51·6	53·8	54·8	57·6	61·4	63·5	65·5	68·4	71·4	70·0	68·7	61·3	64·5	52·3	43·3	38·0	38·8	56·8
5 d	31·9	29·8	33·2	36·8	41·1	46·1	53·0	56·3	58·7	60·5	63·3	65·2	65·3	65·7	63·5	62·4	61·8	60·3	59·3	57·8	57·6	56·3	51·5	51·0	*53·7*
6	45·3	46·8	47·4	47·4	51·6	52·7	53·1	52·7	54·2	56·8	59·5	61·5	63·5	64·2	64·1	63·1	61·9	59·6	59·6	59·6	58·8	58·9	58·9	58·3	56·6
7	58·0	57·2	56·8	55·5	53·5	53·2	53·4	54·6	54·3	55·6	58·7	60·4	61·6	61·5	61·5	61·2	60·9	60·8	60·6	59·8	59·1	58·6	58·9	58·1	58·1
8	57·5	56·5	55·3	56·2	56·2	54·5	53·5	52·5	53·5	55·7	58·5	61·7	65·2	65·9	65·4	64·4	63·2	61·8	61·0	59·9	59·7	59·7	57·9	57·2	58·9
9 q	56·7	56·4	56·1	55·4	53·8	53·3	53·3	52·6	52·5	53·5	56·6	59·3	61·9	62·7	61·9	60·2	59·6	59·5	59·4	58·6	57·8	57·5	57·3	57·4	57·2
10	57·9	57·3	58·5	56·5	53·3	52·2	52·7	53·6	54·7	56·9	58·5	61·3	63·5	65·1	64·4	61·9	60·6	59·8	59·6	59·0	58·6	59·5	58·9	59·4	58·5
11	54·3	55·2	55·9	55·2	54·2	52·4	53·2	53·5	55·5	57·8	60·3	62·4	64·1	63·6	62·8	61·7	60·8	60·2	58·7	57·8	58·3	57·9	58·1	58·0	58·0
12 q	58·0	57·8	57·1	56·0	54·7	52·8	51·9	51·8	52·5	53·9	56·7	60·6	63·2	62·4	61·3	59·6	59·6	57·6	57·5	57·6	58·6	58·8	57·4	56·6	57·3
13 q	55·3	55·6	56·3	54·5	53·5	51·7	52·4	51·9	52·9	55·5	58·7	61·5	62·8	63·3	62·4	61·0	60·3	58·6	58·0	57·6	57·9	58·5	58·4	58·5	57·4
14 d	56·7	55·8	54·6	52·3	47·8	52·7	62·6	63·2	57·7	59·7	59·9	61·1	64·3	65·5	64·6	63·5	62·4	61·6	60·7	60·5	59·3	56·7	56·3	56·4	59·0
15	56·3	55·7	55·6	55·7	58·3	56·4	53·6	51·9	52·4	54·5	58·4	61·5	64·3	66·2	66·3	64·6	62·6	61·4	60·8	59·3	53·3	54·6	55·7	53·3	58·0
16	55·4	55·3	54·7	53·5	53·3	51·9	51·6	51·1	51·6	54·1	57·4	60·3	62·9	62·9	62·5	62·7	62·3	62·7	62·4	54·5	54·7	56·7	56·2	56·6	57·0
17	56·0	59·4	56·1	56·7	55·5	53·6	52·5	51·6	52·5	55·3	57·8	60·8	63·3	64·6	65·3	65·3	64·2	63·4	59·8	57·2	57·0	57·5	58·3	55·9	58·3
18	57·0	57·6	54·5	53·5	51·6	52·5	53·5	53·8	54·4	56·7	60·3	62·5	64·5	65·7	65·3	64·4	64·4	62·9	61·4	60·8	60·3	55·1	58·5	55·5	58·6
19	56·7	55·9	55·5	53·5	54·2	52·5	52·3	54·2	53·7	56·5	56·9	60·8	63·7	64·8	64·0	63·8	62·3	60·6	59·4	57·5	57·5	58·0	56·7	56·7	57·8
20	56·5	56·0	55·5	54·7	53·4	50·8	49·7	49·4	50·6	52·2	54·7	57·5	59·5	61·6	64·8	68·4	68·5	65·5	61·2	59·9	59·7	57·7	57·6	52·8	57·4
21	55·9	58·9	63·7	56·4	52·5	51·9	51·7	51·7	52·3	54·4	57·2	61·2	63·4	63·5	64·2	62·6	62·3	61·8	62·0	61·4	58·8	59·2	55·2	54·9	58·2
22	56·8	57·8	57·7	54·5	53·5	52·9	50·9	55·3	60·9	56·7	55·6	58·8	61·3	63·4	64·1	63·5	62·7	66·2	62·1	55·4	51·8	54·4	56·4	55·5	57·8
23	58·2	55·8	55·5	54·6	54·5	52·9	52·6	51·8	52·6	54·5	54·3	55·7	58·9	59·7	61·4	62·1	62·3	61·5	60·8	59·7	59·6	54·4	53·6	55·1	56·8
24	56·5	55·9	56·1	53·8	55·0	50·7	50·4	49·5	49·7	52·2	55·1	58·3	62·7	64·3	64·0	63·0	60·6	59·4	58·7	57·7	56·4	57·6	57·4	57·4	56·8
25	54·0	56·1	55·7	55·0	53·5	52·6	52·3	52·5	53·6	56·6	60·4	61·8	63·6	64·0	62·6	61·5	60·7	60·1	59·2	59·0	58·9	58·9	58·4	58·6	57·9
26 q	58·1	56·6	55·7	54·8	53·6	52·4	52·2	52·0	52·6	53·7	58·0	61·4	63·9	63·6	61·4	59·9	59·5	59·6	60·5	60·5	60·0	59·6	58·7	57·6	57·7
27 d	58·3	57·7	56·4	55·4	53·6	50·6	50·4	50·4	50·1	53·2	57·9	65·3	69·6	73·0	69·9	69·6	69·4	63·0	59·2	54·3	54·5	53·5	47·8	55·4	58·3
28 d	53·3	55·4	51·6	51·3	52·3	59·3	59·9	61·5	57·4	55·6	58·9	61·8	65·4	65·5	63·7	58·7	59·8	61·1	61·4	60·5	56·3	59·0	57·1	54·9	58·4
29	56·3	54·7	54·9	53·2	52·6	52·9	52·5	51·9	52·8	55·2	57·4	60·3	62·0	62·3	61·4	59·6	59·6	59·6	58·1	58·1	58·9	58·5	58·5	57·4	57·0
30	57·5	56·6	56·9	49·1	49·1	49·1	49·3	50·4	51·6	54·0	57·9	61·3	62·2	62·0	62·4	61·0	58·8	58·3	57·7	58·0	52·6	55·3	55·8	55·6	55·9
31 q	55·7	54·5	54·7	54·4	53·3	52·5	51·5	51·7	52·7	56·3	58·8	62·0	64·5	65·5	64·9	64·3	61·3	60·8	59·8	59·5	58·4	56·9	57·9	57·6	57·9
Mean	55·2	55·1	54·9	53·6	52·9	*52·5*	52·9	53·2	53·9	55·5	58·1	61·1	63·5	*64·3*	64·0	63·2	62·5	61·5	60·1	58·9	57·5	56·9	56·1	55·5	57·6

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

22 LERWICK (V) — 46,000γ (0·46 C.G.S. unit) + — MAY 1942

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	908	909	869	861	852	835	839	850	847	873	893	894	894	898	911	918	917	914	911	906	906	906	902	902	888
2	902	906	910	912	906	906	904	898	894	895	901	901	900	915	945	978	992	980	965	944	942	922	869	864	*919*
3	845	858	859	879	891	899	908	904	899	895	894	895	897	897	899	905	906	910	911	908	908	909	884	869	893
4 d	886	898	901	890	892	898	898	898	894	893	893	889	886	890	894	904	937	963	958	930	952	854	861	844	900
5 d	821	694	726	767	794	811	844	867	874	888	898	893	900	912	908	906	906	913	914	920	921	894	863	868	*863*
6	842	841	851	856	870	886	886	888	887	885	885	885	886	886	894	902	906	913	911	909	909	906	905	904	887
7	903	903	905	905	905	903	903	899	902	904	899	896	894	896	898	899	899	901	903	907	907	907	905	900	902
8	900	901	902	905	900	895	897	899	899	896	892	894	895	891	891	898	901	905	906	908	906	904	903	906	900
9 q	906	905	903	903	903	902	901	899	896	895	896	895	894	895	895	897	897	900	902	906	907	907	903	905	901
10	904	905	896	881	881	881	890	889	886	885	885	882	881	886	890	896	899	898	899	898	898	894	894	886	891
11	870	879	888	898	891	892	893	894	894	894	893	889	891	893	892	899	900	902	905	905	902	900	898	899	894
12 q	901	902	904	903	904	902	899	893	890	891	891	888	890	888	894	900	907	920	929	925	916	906	901	889	901
13 q	890	900	902	907	908	907	908	908	904	901	897	892	896	901	906	910	910	906	904	903	901	899	899	896	902
14 d	891	892	897	899	899	903	901	849	851	868	870	874	882	899	918	931	930	922	918	908	912	913	907	903	897
15	908	909	908	904	890	881	880	886	892	894	897	903	905	907	907	909	916	913	907	913	928	916	904	896	903
16	902	907	909	908	906	902	906	902	900	896	890	889	895	896	900	899	904	909	918	930	923	916	913	908	905
17	903	888	888	901	900	903	905	905	900	895	894	892	894	898	899	899	905	915	929	929	923	915	906	898	903
18	892	867	860	885	892	898	898	899	895	894	890	885	883	889	894	906	913	909	911	910	910	910	873	887	894
19	894	896	897	898	897	903	903	901	900	895	890	891	895	897	903	901	903	905	914	916	914	910	905	904	901
20	903	903	904	907	909	911	908	902	891	881	877	874	880	882	882	889	896	912	919	909	913	912	875	884	897
21	896	897	826	846	883	896	897	897	900	899	898	896	890	890	902	918	921	917	911	912	912	909	903	898	896
22	897	897	897	903	904	906	909	911	898	895	896	894	893	897	903	908	923	949	969	955	877	901	904	887	907
23	857	847	884	897	907	904	907	904	903	902	898	890	892	896	902	908	908	901	909	914	912	917	910	906	899
24	903	900	900	901	895	889	895	898	899	901	901	900	897	895	898	907	918	908	910	917	918	910	898	869	901
25	837	880	894	899	897	901	901	902	897	895	894	888	887	891	897	899	898	898	898	899	902	904	905	904	894
26 q	902	904	904	904	904	904	902	902	896	891	887	884	888	892	894	902	908	905	906	905	904	904	904	902	900
27 d	902	902	905	905	905	902	897	894	886	881	877	883	876	878	905	916	948	991	961	895	874	824	802	792	892
28 d	839	877	894	901	893	872	846	856	882	901	902	907	904	916	918	936	934	929	922	919	905	891	887	859	895
29	881	888	895	899	899	901	901	901	900	897	895	895	903	904	904	910	908	908	910	915	908	908	904	904	902
30	896	880	839	864	884	895	900	900	895	891	888	886	891	895	903	912	913	909	909	913	911	899	893	893	894
31 q	892	897	902	905	909	909	907	905	903	899	897	896	895	895	899	909	914	914	916	911	907	904	898	897	903
Mean	886	885	*885*	890	893	893	895	893	892	893	892	891	892	896	901	909	914	917	*918*	914	911	902	893	888	897

Corrections to be applied to all values: H, -6γ; D, $-4{\cdot}2'$; V, -4γ.

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

23 LERWICK — MAY 1942

	TERRESTRIAL MAGNETIC ELEMENTS												3-hr. range indices *K*	Sum of *K* indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination			Vertical force							
	Maximum 14,000γ +		Minimum 14,000γ +		Range	Maximum 11° +	Minimum 11° +	Range	Maximum 46,000γ +		Minimum 46,000γ +	Range				
	h. m.	γ	γ	h. m.	γ	h. m.	′	′	h. m.	′	h. m.	γ	γ	h. m.	γ				°A.
1	17 30	422	328	7 50	94	13 0	65·3	44·6	5 0	20·7	16 12	922	831	5 38	91	3,2,3,3,2,2,1,0	16	1	83·5
2	16 16	484	318	22 43	166	16 25	71·4	48·9	23 40	22·5	16 4	1003	840	22 33	163	0,1,2,2,3,3,2,4	17	1	81·7
3	19 33	420	320	0 13	100	13 51	63·2	50·7	1 39	12·5	21 6	913	833	0 13	80	3,2,2,2,1,1,1,3	15	1	83·3
4 d	18 23	524	214	22 24	310	16 20	*75·4*	29·6	24 0	45·8	18 21	1007	808	21 39	*499*	2,1,1,1,3,4,5,4	21	1	82·5
5 d	21 34	443	*-33*	1 11	*476*	13 31	66·5	*-6·0*	1 39	*72·5*	20 21	923	*605*	1 50	*318*	7,3,3,1,2,2,1,3	22	2	82·0
6	19 9	427	362	12 24	65	12 52	64·9	43·8	0 30	21·1	17 10	916	836	1 48	80	2,3,1,1,1,2,2,0	12	0	81·8
7	18 35	425	364	11 56	61	12 4	62·3	52·6	6 16	*9·7*	19 58	912	893	12 20	19	0,0,2,2,1,1,1,1	8	0	81·5
8	18 57	436	370	11 22	66	12 53	66·2	52·0	7 23	14·2	19 37	912	889	14 0	23	1,1,1,1,1,1,1,1	8	0	81·0
9 q	18 17	422	362	11 44	60	13 50	63·1	50·9	8 15	12·2	21 13	909	892	9 38	*17*	0,0,1,2,0,0,0,1	4	0	80·8
10	23 14	444	383	14 59	61	13 41	65·9	51·6	6 4	14·3	1 40	906	871	23 47	35	2,2,1,1,2,2,2,2	14	0	81·0
11	0 15	437	424	10 50	*13*	12 47	64·5	51·1	5 15	13·4	18 0	906	858	0 20	48	2,1,1,1,1,2,1,0	9	0	81·5
12 q	17 55	446	366	11 15	80	12 30	64·0	51·6	7 25	12·4	18 10	931	884	22 23	47	0,0,1,1,1,2,2,2	9	0	81·5
13 q	23 41	429	363	11 7	66	13 20	63·4	51·6	6 50	11·8	15 42	913	881	0 15	32	1,1,1,0,1,1,0,2	7	0	81·1
14 d	3 40	447	329	6 35	118	13 35	66·4	46·0	5 9	20·4	16 2	935	837	7 25	98	1,3,3,3,3,2,2,1	17	1	82·0
15	20 35	433	368	11 23	65	15 8	67·3	48·0	20 32	19·3	20 29	934	876	6 8	58	0,2,2,1,2,2,3,2	14	0	82·0
16	19 7	455	364	12 42	91	15 59	64·1	47·8	19 41	16·3	19 37	941	886	11 10	55	1,1,1,2,1,2,3,1	12	1	81·4
17	19 34	445	365	9 30	80	15 23	66·5	50·8	7 10	15·7	19 5	939	908	1 48	31	2,1,1,2,1,2,2,1	12	0	81·1
18	17 38	438	353	11 33	85	13 55	66·2	49·0	21 18	17·2	21 15	916	853	2 7	63	3,1,1,1,1,2,2,3	14	0	81·5
19	17 26	439	367	10 5	72	13 37	65·2	51·3	6 10	13·9	19 18	917	887	10 55	30	0,1,1,1,1,2,1,0	7	0	81·7
20	17 38	469	365	22 44	104	16 13	70·5	48·6	7 13	21·9	18 10	928	838	22 40	90	0,1,2,1,2,3,3,3	15	1	82·0
21	19 5	437	329	2 11	108	2 14	67·5	50·6	7 38	16·9	16 7	923	799	2 50	124	4,4,1,1,3,3,2,2	20	1	82·5
22	17 32	482	331	8 10	151	17 40	70·9	46·6	6 26	24·3	18 21	981	858	24 0	123	1,2,3,2,1,4,4,3	20	1	83·5
23	17 55	455	367	0 55	88	0 50	66·9	49·2	7 43	17·7	21 44	923	837	1 5	86	3,1,2,2,2,3,2,2	17	1	84·0
24	17 59	437	361	11 17	76	14 13	65·1	47·8	7 46	17·3	16 21	922	845	24 0	77	1,2,1,1,2,2,1,3	13	0	84·0
25	18 39	431	371	10 34	60	12 51	64·8	51·6	0 2	13·2	22 40	906	827	0 22	79	3,0,1,1,2,1,1,0	9	0	83·5
26 q	18 27	429	361	9 50	68	13 8	64·9	51·2	7 41	13·7	17 5	910	881	11 50	29	0,0,1,2,1,1,1,1	7	0	83·3
27 d	18 59	*535*	336	23 28	199	13 32	74·1	31·7	19 0	42·4	17 42	*1011*	755	23 10	256	0,1,1,3,3,4,5,4	21	1	83·3
28 d	15 53	441	281	5 34	160	12 50	67·4	50·0	2 28	17·4	15 43	941	810	0 3	131	4,4,4,1,2,2,3,3	23	1	83·0
29	18 12	435	355	9 39	80	13 25	62·7	51·1	7 16	11·6	19 8	917	868	0 0	49	2,1,1,1,1,2,2,1	11	0	83·0
30	18 41	429	359	9 28	70	12 20	62·9	48·5	6 0	14·4	20 17	916	832	2 38	84	3,3,1,2,1,1,2,1	14	0	83·6
31 q	17 55	428	367	8 50	61	13 2	66·2	51·2	6 7	15·0	18 23	918	891	0 20	27	1,0,0,1,1,1,1,1	6	0	83·8
Mean	- -	446	338	- -	108	- -	66·3	46·6	- -	19·7	- -	931	845	- -	85	1·7	13·4	0·45	82·3

q denotes an international quiet day and d an international disturbed day.

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

24 LERWICK (H) — 14,000γ (0·14 C.G.S. unit) + — JUNE 1942

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	399	401	401	401	403	402	397	390	384	372	365	367	375	380	396	406	420	417	421	429	430	421	419	415	400
2 q	412	411	409	409	408	406	401	389	380	372	375	381	392	395	396	404	416	425	430	430	422	415	412	410	404
3	410	410	411	413	413	409	401	391	379	366	370	382	393	415	404	427	430	453	451	441	423	418	404	394	409
4	388	391	396	401	400	396	387	379	375	368	371	375	388	393	405	411	424	430	434	425	418	415	411	407	399
5	402	392	392	410	412	409	403	384	364	355	357	363	373	391	407	426	430	426	426	425	425	422	419	416	401
6	407	408	402	397	400	397	392	392	389	381	369	373	374	382	393	408	414	418	418	418	414	414	412	413	399
7 q	412	408	407	401	393	392	392	391	383	381	385	391	392	391	391	402	407	408	414	418	418	416	412	407	401
8	407	404	396	409	406	400	393	390	386	386	382	388	399	388	397	413	428	424	423	418	413	413	408	407	403
9 q	408	408	406	405	404	401	393	387	378	370	370	380	391	399	413	416	421	421	422	419	418	413	414	413	403
10 q	413	411	412	413	411	404	396	389	381	376	379	384	392	400	409	426	425	422	425	426	427	427	424	424	408
11 d	431	428	426	424	417	413	404	392	402	398	382	370	381	406	424	424	517	510	513	498	409	392	389	397	*423*
12	349	349	372	382	379	374	378	376	372	358	353	381	383	407	407	419	447	459	443	424	419	407	409	404	394
13 d	392	372	377	395	396	390	384	376	369	364	368	384	398	406	413	432	465	431	459	450	415	404	377	383	400
14	384	383	387	383	371	365	366	385	381	362	358	368	374	380	401	410	432	441	424	435	416	410	395	400	*392*
15	398	393	382	386	393	390	379	374	369	368	370	375	378	383	388	395	405	413	423	424	420	417	408	401	393
16	400	392	392	399	394	398	402	397	384	371	369	369	380	392	390	408	413	426	435	427	423	416	417	412	400
17	415	415	412	410	405	409	404	387	374	368	367	381	383	404	395	422	419	424	433	438	433	423	417	413	406
18	406	385	386	410	409	404	395	387	379	366	370	382	386	401	401	410	416	418	418	420	417	413	411	410	400
19 d	408	407	407	409	410	407	396	387	380	378	378	388	412	426	410	468	540	533	482	441	424	386	382	392	419
20	402	396	395	387	382	395	393	378	358	361	367	366	371	374	401	409	414	430	422	418	420	402	401	401	393
21	404	397	398	398	386	377	396	394	386	378	375	375	386	397	401	415	417	420	421	418	415	411	404	402	399
22 q	401	402	402	403	405	406	404	395	386	375	370	374	382	395	398	407	413	413	421	421	418	420	420	415	402
23	411	410	410	411	411	405	402	395	392	386	381	380	381	387	395	409	432	453	447	430	426	417	412	401	408
24	384	369	385	395	396	388	385	382	378	381	380	375	378	387	399	401	421	416	425	419	419	415	412	415	396
25	399	383	384	391	398	400	387	378	376	376	377	373	379	393	400	406	408	425	430	431	424	411	401	400	397
26	400	406	404	401	390	396	392	386	380	377	376	378	387	394	401	403	416	428	434	418	419	407	405	401	400
27	395	393	393	398	392	395	390	380	375	377	381	382	390	387	397	403	412	424	429	426	421	418	412	410	399
28	410	411	410	409	406	403	401	389	367	375	379	379	394	417	443	439	457	473	456	440	431	427	407	387	413
29 d	383	361	365	379	387	388	387	377	375	366	373	379	387	410	413	432	443	455	467	438	437	427	412	403	402
30 d	393	370	378	379	339	361	389	387	369	361	356	363	377	411	418	430	439	438	438	430	410	406	410	400	394
Mean	401	395	397	400	397	396	393	386	378	372	*372*	377	385	396	403	416	431	436	*436*	430	421	413	408	405	402

Corrections to be applied to all values: H, −6γ; D, −4·2′; V, −3γ.

MAGNETIC DECLINATION (WEST)

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

25 LERWICK (D) — 11° + — JUNE 1942

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	60·3	56·8	54·8	52·6	50·6	48·5	49·3	50·9	51·6	54·4	57·7	61·2	63·6	64·1	63·7	62·7	62·4	61·2	60·4	60·4	57·1	57·6	58·0	57·4	57·4
2 q	56·4	56·3	55·4	54·6	53·4	51·5	51·2	50·8	51·7	54·8	58·1	60·5	61·5	63·2	64·3	64·5	63·5	62·7	61·7	60·6	59·9	59·2	58·4	57·7	58·0
3	57·6	57·2	54·7	53·6	51·8	50·4	50·3	51·6	54·6	57·8	60·5	63·0	65·0	67·0	67·7	69·4	65·9	62·3	63·7	62·3	60·8	56·5	53·5	56·7	58·9
4	57·7	57·1	54·7	54·5	53·2	52·4	52·6	52·2	52·7	54·6	56·9	59·7	61·4	63·2	62·5	61·8	60·9	61·7	61·8	57·9	59·5	60·0	58·7	56·0	57·7
5	55·0	53·5	50·7	51·8	49·6	48·0	49·6	50·9	53·6	56·2	58·7	61·4	62·3	63·9	64·3	63·8	63·2	61·9	61·7	61·1	60·8	60·1	59·8	58·7	57·5
6	59·2	56·7	53·7	53·8	53·6	54·4	54·6	54·2	54·7	58·5	60·8	63·0	63·3	63·7	64·9	63·3	61·1	60·2	60·3	60·0	58·9	58·6	58·5	57·8	58·7
7 q	57·0	55·4	53·8	53·6	60·4	52·7	54·6	53·6	52·7	53·7	56·6	59·7	61·6	61·6	60·6	60·0	59·8	59·4	59·4	58·5	58·6	59·2	58·4	57·2	57·4
8	56·6	56·8	59·5	54·7	53·0	50·8	51·1	52·2	54·3	56·7	60·5	63·3	64·5	63·5	62·1	61·5	60·4	59·5	59·3	59·3	58·6	58·9	58·3	57·3	58·0
9 q	57·0	56·7	55·5	54·2	52·7	50·9	51·1	52·8	55·3	57·5	59·8	62·1	63·3	63·8	63·4	61·5	61·1	61·1	61·1	60·7	60·3	59·3	58·4	58·6	58·3
10 q	57·3	56·6	55·8	55·5	53·8	52·9	52·2	52·2	52·7	54·9	58·0	62·3	65·5	65·4	65·1	63·6	61·5	59·7	59·3	59·7	60·0	60·5	60·6	59·8	58·5
11 d	57·7	56·6	56·4	54·6	50·1	48·1	46·4	49·5	48·7	51·8	56·0	63·3	67·2	69·3	71·6	71·5	70·6	68·5	64·1	58·6	50·6	55·4	52·3	46·9	57·7
12	50·5	53·7	46·9	49·7	51·5	52·2	52·1	55·3	53·6	54·5	60·3	61·5	63·2	66·6	66·9	66·0	60·5	59·8	60·9	60·4	59·6	58·5	58·6	55·8	57·4
13 d	57·8	61·8	58·4	48·3	49·8	50·7	51·8	52·3	54·6	55·2	58·8	62·1	62·7	63·6	63·6	64·5	60·7	59·7	64·5	62·1	53·6	58·2	61·7	53·3	57·9
14	48·4	53·7	50·4	49·5	49·5	52·7	53·6	53·8	53·0	55·3	57·9	60·7	62·7	60·8	60·2	62·0	57·9	60·0	59·8	55·4	58·8	58·7	55·8	58·0	56·2
15	57·0	58·6	57·7	56·7	52·2	49·5	47·9	49·3	50·6	52·0	55·2	58·7	61·5	61·9	62·6	62·6	60·9	59·5	57·9	57·5	57·7	57·9	57·4	56·7	56·6
16	59·2	58·4	55·5	53·0	52·7	51·7	50·7	49·5	50·8	53·7	58·4	62·3	64·1	64·5	64·0	62·5	60·9	60·7	61·3	55·7	56·7	58·6	58·6	57·3	57·5
17	58·3	57·3	55·9	54·8	52·4	52·6	51·6	51·6	55·0	59·2	63·9	61·8	64·5	63·7	62·5	60·8	61·0	60·6	61·5	61·5	60·5	60·6	59·5	59·5	58·8
18	62·3	56·2	47·6	48·5	48·7	49·8	52·0	53·0	53·4	56·7	57·9	59·6	61·6	62·6	63·5	63·4	61·7	61·5	61·0	60·5	60·1	59·1	58·6	57·7	57·4
19 d	59·2	58·0	53·2	52·1	49·8	48·5	48·6	50·3	51·1	52·6	55·4	59·9	63·5	63·5	67·5	70·7	66·4	61·6	62·9	62·5	62·0	55·4	53·6	56·0	57·7
20	55·6	54·0	56·9	55·9	56·1	54·6	51·5	50·5	54·9	55·3	56·3	58·9	61·9	62·6	61·8	61·8	60·6	60·4	59·9	60·3	58·0	57·8	57·4	57·6	57·5
21	56·9	58·0	52·6	52·1	54·3	57·5	54·9	52·1	52·4	53·6	55·5	57·9	60·3	62·8	62·9	62·6	62·5	62·0	61·3	59·9	59·5	59·6	59·7	57·7	57·9
22 q	56·3	55·0	54·0	53·4	51·4	50·4	50·9	52·0	52·9	53·2	54·8	58·2	60·4	61·5	61·8	62·1	61·9	61·6	61·1	60·9	59·1	58·6	58·8	56·7	57·0
23	56·3	54·6	53·4	52·1	50·3	48·4	48·6	50·3	49·9	52·3	53·8	56·7	59·6	61·5	62·4	63·9	65·7	67·9	65·8	63·3	60·5	58·8	58·2	58·3	57·2
24	58·3	50·5	48·9	45·1	50·6	49·8	49·5	50·5	54·1	54·7	57·4	61·7	63·5	64·6	65·3	62·5	61·9	61·5	60·4	60·4	59·6	58·9	58·3	56·5	56·9
25	47·2	43·1	43·2	47·3	45·4	46·7	49·3	48·8	50·7	53·7	56·5	59·0	61·5	62·9	64·0	62·5	59·7	59·8	60·2	59·6	58·2	58·7	57·4	55·9	*54·6*
26	55·8	55·8	55·6	53·9	54·6	51·5	48·8	49·4	50·9	53·3	57·1	60·7	65·0	66·5	66·1	64·2	62·2	60·5	58·6	58·9	56·4	52·3	55·9	57·5	57·1
27	56·4	54·4	51·6	51·0	52·2	52·1	50·6	50·5	52·3	54·9	56·9	59·6	62·0	63·0	62·5	61·6	60·5	60·4	60·0	60·0	59·3	58·6	57·0	56·6	56·8
28	56·3	56·2	56·2	55·6	54·4	53·2	51·9	52·8	56·3	59·2	59·8	62·5	65·2	66·8	69·1	67·4	67·1	62·7	65·4	62·6	62·3	59·8	58·9	52·7	*59·8*
29 d	59·3	47·0	44·8	45·9	46·8	50·2	48·6	50·7	51·7	55·4	58·8	64·3	67·5	67·8	67·8	66·9	67·4	66·5	62·0	62·5	61·1	59·9	58·2	54·5	57·7
30 d	57·3	51·4	48·0	43·7	55·5	61·5	55·3	52·4	49·8	53·3	56·8	60·0	62·1	62·7	65·2	63·1	60·9	63·3	60·9	57·5	59·6	58·1	54·9	53·6	57·0
Mean	56·7	55·3	53·2	52·1	52·0	51·5	*51·0*	51·5	52·7	55·0	57·8	60·9	63·1	63·9	*64·3*	63·8	62·4	61·6	61·3	60·0	58·9	58·5	57·8	56·5	57·6

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

26 LERWICK (V) — 46,000γ (0·46 C.G.S. unit) + — JUNE 1942

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	886	886	899	904	906	907	904	897	891	886	884	878	877	881	884	892	897	907	907	904	898	902	899	898	895
2 q	899	900	900	902	903	901	903	904	898	889	887	884	885	889	894	895	898	902	906	907	906	903	900	899	898
3	898	899	901	904	906	904	899	897	895	887	878	872	882	887	899	904	929	944	937	925	924	917	895	899	903
4	891	872	888	900	905	909	911	910	906	902	897	886	880	881	884	890	895	903	907	917	913	906	902	896	898
5	873	860	877	881	889	894	894	899	899	892	889	888	889	891	892	899	914	918	913	905	900	900	899	897	894
6	889	885	893	902	900	899	895	893	891	885	887	885	893	895	895	895	902	901	900	902	903	902	899	895	895
7 q	890	891	896	898	897	891	885	885	887	887	886	890	897	898	896	894	896	897	896	901	901	900	898	900	894
8	896	895	882	884	890	893	892	890	888	890	893	888	893	902	903	899	895	895	897	898	897	898	900	900	894
9 q	900	900	900	900	899	896	895	893	890	888	887	886	883	886	891	895	894	896	897	897	896	897	898	900	894
10 q	901	901	903	901	903	903	900	898	893	885	886	889	890	896	895	894	898	901	901	897	895	896	897	896	896
11 d	895	897	897	890	889	886	886	880	869	871	871	868	867	880	898	933	971	1002	993	991	930	888	875	851	903
12	825	776	836	872	893	895	892	886	890	896	894	900	905	908	918	919	946	959	940	926	915	909	892	889	895
13 d	897	882	832	857	885	895	896	902	899	897	891	875	874	885	899	902	926	941	921	910	898	896	843	808	888
14	827	836	832	860	875	884	878	884	891	898	900	897	902	921	931	926	927	927	928	923	913	904	903	894	894
15	896	890	874	869	879	893	902	904	900	893	894	898	903	904	903	904	903	903	906	912	910	906	904	900	898
16	895	883	886	887	893	894	896	899	899	899	898	894	891	891	900	899	903	904	906	921	920	911	901	899	899
17	897	901	902	899	892	889	891	896	896	896	889	893	905	903	911	911	920	925	917	912	912	910	904	899	903
18	886	811	839	861	880	890	899	899	901	900	901	899	895	892	896	896	902	903	903	901	899	901	898	897	890
19 d	897	874	887	896	900	901	900	897	892	887	884	882	882	900	929	935	960	935	971	961	939	904	887	876	*907*
20	891	898	887	875	849	859	881	896	899	896	903	906	911	907	907	919	925	917	924	925	919	914	911	906	901
21	898	889	875	871	872	881	881	896	903	903	904	898	897	895	897	904	909	909	908	909	909	910	908	905	897
22 q	904	903	903	903	898	899	898	900	902	905	904	898	896	891	891	892	896	900	902	906	907	907	905	902	901
23	900	900	901	900	898	897	895	894	888	886	888	889	882	880	878	884	895	910	944	937	924	917	913	907	900
24	865	789	789	817	855	881	890	889	888	889	891	890	889	893	902	911	913	911	905	903	897	897	892	854	879
25	834	814	798	793	820	843	864	883	889	893	896	897	899	895	894	898	907	907	910	908	910	908	904	906	*878*
26	905	903	899	897	897	886	891	894	893	891	888	885	885	893	899	903	906	912	914	911	903	897	892	896	897
27	898	898	899	898	897	888	892	894	893	889	890	891	892	894	891	897	899	898	898	898	898	898	898	897	895
28	899	899	900	897	896	891	889	892	898	885	881	880	886	896	906	936	968	960	933	927	912	906	898	881	905
29 d	852	802	804	832	857	877	882	886	891	894	896	896	896	895	896	893	901	907	937	947	921	914	901	893	886
30 d	857	818	815	828	835	788	827	856	881	891	895	886	888	891	908	933	943	935	931	919	906	901	889	861	878
Mean	885	*872*	873	879	885	887	890	893	893	892	891	889	891	894	900	905	915	918	*918*	917	909	904	897	890	895

Corrections to be applied to all values: H, −6γ; D, −4·2′; V, −3γ.

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

27 LERWICK — JUNE 1942

	TERRESTRIAL MAGNETIC ELEMENTS												3-hr. range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination			Vertical force							
	Maximum 14,000γ +		Minimum 14,000γ +		Range	Maximum 11° +	Minimum 11° +	Range	Maximum 46,000γ +		Minimum 46,000γ +		Range			
	h. m.	γ	γ	h. m.	γ	h. m. ′	′ h. m.	′	h. m.	γ	γ	h. m.	γ			°A.
1	20 51	434	361	10 50	73	12 59 64·3	47·5 5 49	16·8	17 59	910	874	12 30	36	2,1,1,1,1,2,2,1	11	0	83·6
2 q	19 40	431	371	9 15	60	15 28 64·9	50·6 7 44	14·3	20 4	908	882	11 40	26	0,0,1,1,2,1,1,0	6	0	83·0
3	17 45	464	355	9 40	109	15 43 70·1	49·9 5 54	20·2	17 24	947	871	11 29	76	1,1,2,2,3,3,3,3	18	1	83·0
4	18 45	439	367	9 11	72	13 33 63·5	51·2 8 7	12·3	19 43	919	866	1 33	53	2,0,1,2,1,1,2,2	11	0	83·6
5	16 5	453	353	9 26	100	16 6 66·4	46·9 5 35	19·5	16 56	923	856	1 30	67	2,1,2,1,2,3,1,1	13	0	84·1
6	18 33	421	363	10 38	58	14 34 65·3	51·7 2 53	13·6	20 43	904	880	1 14	24	2,2,2,1,1,1,0,1	10	0	85·0
7 q	19 41	421	380	9 40	*41*	12 23 62·0	51·7 4 55	*10·3*	20 42	902	883	7 6	19	1,1,1,2,2,1,1,0	9	0	85·2
8	16 15	434	372	13 21	62	12 19 64·8	50·2 6 26	14·6	14 24	905	879	2 52	26	2,1,1,1,2,2,1,0	10	0	84·9
9 q	17 54	424	366	10 14	58	12 11 63·4	48·8 6 33	14·6	2 52	901	882	12 0	19	0,0,2,1,1,1,0,1	6	0	84·0
10 q	15 24	432	374	9 9	58	13 5 66·0	51·9 6 25	14·1	5 19	904	883	10 2	21	0,1,0,1,0,2,1,0	5	0	83·5
11 d	16 17	556	345	11 2	211	16 11 *75·5*	43·0 23 38	*32·5*	19 30	*1023*	834	24 0	189	1,2,2,3,4,5,4,3	24	1	83·0
12	16 54	482	*285*	0 54	197	14 5 68·5	44·9 2 34	23·6	17 27	968	*759*	1 15	*209*	4,2,2,3,3,3,3,2	22	1	82·5
13 d	16 3	485	341	23 9	144	16 0 67·1	46·7 4 0	20·4	17 26	947	783	23 2	164	3,3,1,2,3,4,3,4	23	1	82·0
14	19 30	453	348	10 36	105	12 30 64·0	42·8 0 33	21·2	14 10	938	817	1 58	121	3,3,3,2,3,3,3,2	22	1	82·8
15	19 8	428	364	9 57	64	15 23 63·0	46·9 6 41	16·1	19 40	913	865	2 51	48	2,2,1,1,1,1,1,1	10	0	83·5
16	18 43	452	365	10 15	87	13 5 65·1	48·9 7 17	16·2	19 54	928	881	1 42	47	2,1,1,2,2,2,3,1	14	1	84·0
17	19 4	450	358	10 24	92	10 17 67·5	49·9 7 10	17·6	17 30	928	886	5 31	42	2,2,2,3,3,3,2,1	18	1	84·1
18	17 52	430	358	9 20	72	14 17 63·9	44·9 2 25	19·0	16 54	908	799	1 32	109	4,2,2,3,1,2,0,0	14	1	84·0
19 d	16 35	*582*	367	10 13	*215*	16 45 73·1	47·0 5 40	26·1	16 12	985	866	1 44	119	2,1,1,2,4,5,3,3	21	1	84·0
20	17 20	445	354	8 52	91	13 8 63·5	49·5 7 12	14·0	16 53	927	843	4 38	84	2,3,2,2,3,2,2,1	17	1	83·5
21	18 15	423	371	5 36	52	14 27 63·4	50·5 3 37	12·9	22 10	911	867	4 27	44	2,3,2,0,2,1,0,1	11	0	84·1
22 q	19 0	425	369	10 4	56	17 5 62·5	50·0 5 32	12·5	21 25	908	890	13 38	18	0,1,0,0,1,2,1,1	6	0	84·8
23	17 29	463	371	11 5	92	17 56 70·2	47·2 5 58	23·0	18 35	952	874	14 13	78	1,1,1,1,2,3,2,1	12	1	85·0
24	16 7	432	358	1 29	74	14 14 66·0	43·0 3 26	23·0	16 44	917	774	1 34	143	4,3,2,2,2,2,1,3	19	1	85·1
25	20 3	439	370	9 20	69	14 39 64·5	*40·2* 2 1	24·3	19 58	914	789	3 38	125	3,3,2,2,1,2,2,2	17	1	85·4
26	18 33	439	372	9 26	67	13 46 67·0	48·0 6 21	19·0	18 20	918	883	12 21	35	1,2,1,2,1,2,2,2	13	0	85·6
27	18 19	432	370	8 48	62	13 29 63·2	49·5 7 18	13·7	0 58	901	886	5 29	*15*	2,2,1,1,2,1,0,1	10	0	85·6
28	17 57	487	359	23 57	128	14 45 71·5	50·3 23 21	21·2	17 23	976	872	24 0	104	0,1,2,2,3,3,3,3	17	1	85·0
29 d	18 55	477	330	1 51	147	13 37 69·0	41·4 2 53	27·6	19 10	960	797	2 28	163	4,3,2,2,3,2,3,2	19	1	85·0
30 d	19 28	453	306	5 2	147	15 18 66·5	41·5 3 22	25·0	16 11	948	778	5 21	170	4,4,3,2,3,2,3,3	24	1	85·3
Mean	- -	453	357	- -	95	- - 66·2	47·5 - -	18·6	- -	930	850	- -	80	1·8	14·4	0·53	84·1

q denotes an international quiet day and d an international disturbed day.

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

28 LERWICK (H) — 14,000γ (0·14 C.G.S. unit) + — JULY 1942

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	399	383	388	395	406	388	354	359	358	352	341	345	371	391	400	418	433	436	439	427	421	409	399	396	392
2 q	395	397	395	396	393	393	393	386	378	366	362	370	384	387	396	409	407	408	419	427	426	416	403	399	396
3 q	399	398	398	405	404	397	392	385	381	375	370	371	370	379	398	397	411	416	421	414	413	408	407	407	397
4 q	405	403	400	401	400	397	395	392	388	375	372	365	371	376	383	396	408	418	420	420	417	408	408	405	397
5 q	404	406	409	413	413	411	405	399	387	375	374	385	380	384	378	403	419	424	435	441	434	422	415	411	405
6	404	402	406	408	408	404	403	393	378	374	379	382	382	393	398	424	447	438	428	426	421	413	400	398	405
7	394	400	401	399	397	394	384	381	378	371	365	368	384	387	400	404	409	421	424	429	427	426	412	403	398
8 d	392	402	401	393	406	384	367	382	348	338	354	354	411	381	397	407	407	423	449	442	414	411	393	343	392
9	350	365	346	380	392	393	386	382	370	362	359	365	377	396	397	414	444	469	438	416	418	410	399	384	392
10	383	389	390	379	369	373	379	386	382	378	377	380	384	380	387	403	413	418	418	418	420	401	403	418	393
11 d	360	370	388	407	414	370	257	301	285	325	354	367	396	460	652	673	510	423	426	447	425	401	409	402	*409*
12	401	390	390	368	340	357	372	373	371	359	326	345	368	401	392	390	394	397	405	425	419	414	402	397	383
13	403	392	388	388	393	388	379	370	368	373	371	376	380	389	393	416	403	422	427	422	413	406	398	391	394
14	391	390	386	394	400	388	384	386	377	367	380	376	381	382	411	396	415	432	437	439	430	419	391	376	397
15 d	394	404	400	383	379	384	388	377	349	349	377	376	379	367	381	428	468	509	460	457	412	413	395	344	399
16	341	378	378	383	383	378	382	376	355	346	351	367	374	377	395	410	416	421	428	437	423	387	387	388	386
17	366	357	400	399	386	353	381	373	364	362	365	356	369	373	385	392	403	417	437	426	417	408	402	400	387
18	398	392	393	395	395	390	383	368	361	366	365	366	381	387	397	404	405	416	420	420	416	410	404	404	393
19 q	402	401	392	398	399	398	391	385	379	368	360	355	361	382	393	402	414	421	417	416	412	413	414	414	395
20 d	405	396	402	404	406	409	393	398	399	383	364	376	364	394	401	406	424	431	430	430	430	400	364	346	398
21	267	206	392	393	382	375	386	381	367	353	357	370	383	388	402	408	401	414	421	418	416	408	391	392	*378*
22	389	386	393	392	395	394	387	380	380	381	367	369	365	395	401	403	415	415	410	408	413	408	410	405	394
23	385	398	400	398	395	391	381	379	384	377	373	376	386	401	397	415	408	440	443	429	413	399	402	404	399
24	395	406	398	376	384	403	394	397	395	385	376	375	378	383	392	407	404	420	435	448	416	403	382	376	397
25	351	352	363	364	376	395	380	379	374	370	364	356	385	400	406	397	387	415	442	454	413	403	394	390	388
26	402	393	394	392	386	381	382	384	382	381	377	377	378	373	383	394	406	416	426	433	432	401	379	364	392
27 d	319	395	381	367	339	370	370	375	373	353	349	375	368	394	419	429	429	415	442	432	424	405	345	342	384
28	400	384	370	355	351	325	366	383	378	364	359	371	376	391	394	398	420	399	412	436	432	411	405	389	386
29	351	368	387	387	396	381	371	367	361	366	367	367	376	384	383	392	403	399	403	409	406	400	401	395	384
30	394	390	384	374	390	393	385	375	361	355	371	376	392	371	395	400	410	420	429	412	418	409	410	397	392
31	372	359	395	399	397	392	393	383	370	356	351	355	355	371	392	406	418	424	417	408	409	408	404	404	389
Mean	381	382	391	390	389	385	379	379	370	365	*364*	368	378	388	403	414	418	424	428	*428*	419	408	398	390	393

Corrections to be applied to all values: H, −6γ; D, −4·2′; V, −1γ.

MAGNETIC DECLINATION (WEST)

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

29 LERWICK (D) — 11° + — JULY 1942

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	53·7	51·9	52·6	52·6	54·4	56·0	61·2	65·3	59·4	54·7	56·0	61·0	61·5	63·9	63·9	62·4	61·8	63·6	61·9	59·2	59·6	57·5	57·9	56·6	58·7
2 q	55·0	54·7	53·8	53·7	54·6	53·0	51·8	50·2	51·8	53·5	55·8	58·5	61·4	62·1	62·4	61·6	60·3	60·7	60·8	59·5	54·9	57·4	55·5	56·7	56·7
3 q	55·5	54·9	56·4	53·9	52·9	51·9	52·7	53·8	53·7	54·6	57·6	59·6	61·9	64·3	64·0	62·5	61·2	59·4	59·2	58·7	58·6	57·4	56·7	56·9	57·4
4 q	57·4	56·6	56·5	54·0	53·0	52·2	52·2	52·7	51·8	53·3	56·8	59·5	61·5	61·2	60·7	60·2	59·4	58·3	57·4	57·3	57·9	58·0	57·1	56·6	56·7
5 q	55·9	55·1	54·4	53·7	52·3	51·2	50·8	51·6	52·9	56·5	59·0	62·0	64·3	66·6	65·4	62·6	62·2	62·2	61·6	61·3	60·8	57·1	59·0	59·5	58·3
6	58·9	53·6	52·3	51·8	51·0	50·8	50·8	51·2	53·7	54·8	56·2	58·5	60·9	63·1	63·2	63·1	62·3	59·5	60·8	61·6	60·9	59·7	60·2	53·7	57·2
7	49·4	51·3	52·3	51·9	51·5	51·0	50·1	52·1	52·2	53·2	56·4	60·5	63·7	64·7	64·1	62·8	61·0	61·1	61·3	60·8	61·2	60·0	57·0	52·4	56·7
8 d	54·7	51·3	45·7	47·2	47·7	44·5	52·4	56·3	55·7	53·5	60·1	62·0	66·4	68·9	68·4	63·6	62·8	61·6	62·4	60·0	57·5	54·6	55·3	55·4	57·0
9	55·7	57·5	50·6	53·5	50·5	50·0	50·6	52·3	53·2	53·7	54·5	57·2	61·2	62·6	62·9	60·0	59·2	55·9	59·9	61·2	60·8	58·8	55·1	51·8	56·2
10	50·8	52·5	53·7	53·0	56·7	54·6	53·3	51·5	52·9	55·0	57·1	60·1	62·1	63·3	63·1	61·7	61·0	60·5	59·6	58·0	57·9	55·3	56·5	59·3	57·1
11 d	54·6	43·0	42·5	54·2	53·1	59·6	64·8	72·5	60·2	61·6	58·8	59·0	65·5	65·6	60·5	67·9	67·6	66·0	66·3	59·9	58·1	57·4	59·7	58·4	*59·9*
12	57·4	54·0	53·7	52·3	53·0	51·4	50·8	51·5	51·9	52·2	57·0	63·2	64·8	65·3	64·4	62·8	61·9	60·7	59·6	60·3	58·3	59·4	57·5	53·8	57·4
13	58·9	49·8	50·0	51·9	52·0	50·7	53·6	55·0	57·2	57·5	59·4	60·9	61·6	61·2	60·8	60·7	58·4	57·6	59·0	58·7	58·7	56·3	56·3	55·0	56·7
14	56·7	57·2	58·0	57·3	53·7	54·9	54·4	52·8	55·1	58·0	58·2	60·9	62·3	62·8	62·9	61·7	59·4	60·0	60·7	61·2	54·0	56·4	60·2	55·3	58·1
15 d	51·4	52·8	52·9	57·3	54·8	56·5	53·3	53·4	54·7	56·9	57·5	60·7	61·4	62·2	60·5	58·6	62·8	51·8	59·6	60·4	54·1	46·6	55·0	56·2	56·3
16	51·9	42·6	51·5	54·0	52·6	54·3	52·8	51·7	54·4	55·0	59·8	61·7	65·6	66·3	64·5	63·0	62·1	59·3	57·7	57·0	57·1	53·1	51·9	51·6	56·3
17	54·0	54·4	52·4	49·8	53·5	59·2	53·8	53·0	52·8	55·1	57·4	56·7	57·9	60·0	60·3	60·3	59·7	57·0	58·2	59·5	59·1	58·4	57·5	57·2	56·5
18	55·5	57·2	55·4	53·1	51·8	50·4	49·6	51·6	53·9	54·6	57·5	58·9	60·9	62·1	62·4	62·2	61·2	60·2	59·2	59·7	59·7	59·4	58·6	57·4	57·2
19 q	57·3	55·8	54·5	53·9	51·5	49·8	49·3	50·3	51·2	52·7	54·3	57·5	60·7	62·6	65·1	63·4	62·6	61·7	60·6	60·0	59·5	59·4	58·0	55·5	57·0
20 d	52·7	54·1	53·2	52·0	50·1	46·1	41·7	48·6	53·6	54·4	57·1	62·5	65·9	68·0	66·9	62·5	60·7	61·0	60·7	60·9	56·0	55·1	55·4	55·0	56·4
21	61·9	49·0	43·4	49·2	45·6	53·1	50·4	51·1	52·5	54·7	56·7	58·4	59·5	61·6	63·8	63·1	61·6	61·2	60·8	58·7	55·1	57·0	53·8	57·6	55·8
22	55·6	56·4	54·3	51·6	50·2	50·1	50·0	50·7	51·8	53·0	55·6	58·4	60·5	58·5	59·8	60·0	59·9	59·7	59·3	58·6	58·1	56·7	55·9	53·1	55·7
23	58·0	51·6	51·9	53·1	51·5	50·7	52·0	54·0	53·7	53·7	56·3	58·9	61·2	63·4	63·5	64·8	63·6	62·1	54·4	60·6	59·1	58·6	56·8	55·7	57·1
24	54·8	55·4	52·3	56·0	59·5	54·3	51·5	50·1	51·5	51·9	52·4	55·9	60·0	62·3	62·6	62·4	59·6	60·6	61·0	50·9	54·0	52·0	51·5	50·1	*55·5*
25	51·8	51·4	55·4	61·1	60·5	57·4	54·6	58·4	56·5	53·9	54·4	60·9	61·8	64·2	58·3	64·6	62·2	61·7	61·4	51·5	52·0	54·4	57·0	58·1	57·6
26	48·3	52·1	53·2	53·5	52·8	52·7	52·1	51·7	52·0	53·8	56·9	60·2	64·1	64·4	64·0	62·3	61·6	61·6	61·7	61·3	60·4	55·7	44·5	42·4	56·0
27 d	36·7	33·8	48·1	54·4	54·0	57·2	51·9	51·7	52·3	54·8	58·9	61·0	62·8	63·4	63·6	63·6	62·7	60·0	52·5	60·9	58·5	58·9	61·1	56·2	55·8
28	53·8	52·0	52·9	52·0	49·3	54·7	54·4	52·5	51·3	53·0	57·4	60·3	62·0	62·4	61·4	61·6	61·1	59·9	58·0	57·9	53·1	54·3	54·9	54·4	56·0
29	63·0	57·8	55·5	53·5	51·7	52·7	52·9	52·1	53·0	55·4	55·5	57·8	60·5	62·7	61·8	59·7	57·7	57·3	57·2	56·8	56·7	56·8	56·8	57·5	56·8
30	59·5	51·5	53·0	58·1	52·8	49·8	50·5	53·5	54·9	54·7	55·5	59·7	63·7	64·5	63·4	61·9	60·9	59·6	55·8	56·6	56·7	55·6	53·8	50·1	56·5
31	51·7	60·8	52·8	50·9	50·6	52·5	51·7	51·1	51·8	52·3	54·6	57·3	60·8	61·6	61·6	60·0	59·1	59·1	58·9	57·7	57·0	58·2	58·0	58·8	56·2
Mean	54·6	52·6	52·4	53·4	52·6	52·7	*52·3*	53·4	53·7	54·6	56·8	59·7	62·2	*63·4*	62·9	62·2	61·2	60·0	59·6	58·9	57·6	56·6	56·3	55·1	56·9

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

30 LERWICK (V) — 46,000γ (0·46 C.G.S. unit) + — JULY 1942

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	868	874	880	890	891	892	897	878	879	886	906	907	900	902	908	912	916	909	917	925	913	908	905	904	899
2 q	902	902	903	903	902	900	901	907	907	898	890	887	889	892	889	897	911	910	910	909	915	895	895	894	900
3 q	895	896	895	896	900	901	902	904	902	901	897	889	890	889	888	893	898	908	909	906	902	902	901	900	899
4 q	898	898	899	901	904	904	903	901	900	899	900	893	887	888	888	888	893	898	902	903	903	905	902	901	898
5 q	900	898	897	898	899	898	897	898	901	897	891	883	885	888	890	889	893	897	900	904	909	912	908	902	897
6	896	893	896	898	898	902	899	900	898	894	888	889	886	883	883	883	900	924	924	912	905	902	901	879	897
7	872	883	893	897	898	899	902	900	898	895	896	891	884	888	889	897	901	900	898	899	903	905	912	901	896
8 d	895	864	818	847	853	865	869	850	869	869	911	921	895	921	922	924	909	908	919	941	885	891	887	836	886
9	815	821	815	867	892	903	905	903	904	904	902	899	896	894	901	909	921	935	935	922	908	903	889	887	893
10	865	888	891	894	890	883	892	899	901	898	895	890	889	890	889	892	904	908	904	902	900	906	901	887	894
11 d	809	755	851	871	875	884	839	790	811	835	862	909	924	965	1063	1085	1051	1004	956	958	934	893	916	910	*906*
12	907	904	900	898	866	852	871	896	899	895	908	902	894	888	892	898	902	901	898	899	914	914	910	896	896
13	869	858	892	898	894	895	907	908	899	899	901	902	902	902	911	915	928	932	929	922	916	914	910	899	904
14	902	899	890	884	892	896	893	891	888	890	888	894	892	902	911	927	938	927	918	911	920	905	879	827	899
15 d	856	885	895	885	877	868	875	881	890	892	886	890	891	901	911	921	933	961	929	918	907	920	894	844	896
16	765	796	837	859	893	888	892	898	896	897	894	895	900	910	918	918	922	921	929	928	919	882	848	865	886
17	844	811	866	881	896	883	873	889	890	887	883	890	894	898	903	908	911	921	920	922	917	913	905	899	892
18	890	888	891	902	906	906	903	902	898	889	890	892	892	897	899	905	912	912	913	911	910	909	906	903	901
19 q	899	893	897	899	903	904	906	903	900	897	895	895	893	894	902	904	908	911	911	909	908	906	904	896	902
20 d	893	897	897	898	897	896	902	893	884	888	885	885	906	900	919	927	927	925	922	922	929	889	880	831	900
21	734	652	772	836	853	862	871	889	905	909	904	902	897	898	901	912	920	911	911	918	919	914	897	885	*874*
22	890	887	897	903	897	900	901	901	900	900	905	897	897	898	900	899	897	899	900	902	903	906	896	885	898
23	866	854	886	892	895	900	899	897	896	898	896	889	892	895	901	895	898	904	925	923	924	914	903	893	897
24	901	885	880	882	854	854	878	887	889	894	894	890	889	889	891	898	909	907	907	916	913	909	901	878	891
25	843	802	827	827	801	824	857	872	883	894	900	906	944	952	987	939	930	914	922	956	915	908	884	794	887
26	869	892	899	904	903	901	897	896	892	894	892	892	896	898	891	895	899	900	896	898	901	908	870	834	892
27 d	761	816	864	873	846	854	871	891	898	907	903	897	927	928	916	914	935	935	934	920	903	893	838	756	883
28	810	867	886	870	862	840	863	877	891	890	888	894	909	911	915	909	907	923	921	910	888	893	892	892	888
29	845	817	859	881	894	906	900	900	905	906	901	899	901	903	905	905	916	918	913	911	909	908	904	889	896
30	842	866	886	881	882	895	903	906	909	909	904	900	896	903	896	900	907	921	929	928	913	907	892	884	898
31	876	846	867	890	900	900	899	901	904	903	901	903	903	903	906	913	915	916	923	922	913	905	899	889	900
Mean	861	*858*	875	884	884	886	889	891	893	894	895	896	898	902	909	912	916	*918*	917	917	910	904	894	875	895

Corrections to be applied to all values: H, -6γ; D, $-4{\cdot}2'$; V, -1γ.

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

31 LERWICK — JULY 1942

	TERRESTRIAL MAGNETIC ELEMENTS												3-hr. range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination			Vertical force							
	Maximum 14,000γ +		Minimum 14,000γ +		Range	Maximum 11° +	Minimum 11° +	Range	Maximum 46,000γ +		Minimum 46,000γ +		Range				
	h. m.	γ	γ	h. m.	γ	h. m.	′	′	h. m.	′	h. m.	γ	γ	h. m.	γ				°A.
1	18 12	452	333	10 14	119	4 12	66·7	50·5	1 2	16·2	18 52	929	866	0 0	63	2,2,3,2,2,2,2,1	16	1	85·3
2 q	20 52	452	359	10 22	93	15 3	63·1	47·1	20 50	16·0	20 30	919	886	11 30	33	1,1,1,1,1,2,3,2	12	0	85·4
3 q	18 14	424	366	12 55	*58*	13 45	65·1	51·0	6 10	14·1	18 39	910	884	14 43	26	1,0,1,1,2,1,1,1	8	0	85·6
4 q	17 53	424	363	11 41	61	12 25	61·6	50·7	8 42	*10·9*	21 50	908	884	12 25	24	0,0,1,1,1,1,0,1	5	0	85·5
5 q	19 56	446	370	14 15	76	13 10	67·0	49·4	6 43	17·6	21 16	913	879	11 58	34	1,0,2,2,3,2,2,1	13	0	85·9
6	17 8	465	371	9 41	94	14 10	64·3	48·8	24 0	15·5	17 35	934	870	23 57	64	2,1,1,1,2,3,2,3	15	0	86·0
7	19 53	439	363	10 31	76	13 15	65·4	47·9	0 9	17·5	22 22	916	870	0 26	46	2,1,1,1,2,2,2,3	14	0	86·0
8 d	19 2	458	290	23 50	168	14 15	74·1	40·2	20 26	33·9	19 25	955	791	23 57	164	4,3,3,4,4,3,5,4	30	1	86·8
9	17 34	483	318	0 0	165	14 29	64·3	48·0	23 14	16·3	18 43	942	791	0 2	151	3,3,1,2,2,3,3,3	20	1	87·5
10	23 37	438	362	4 13	76	13 51	63·9	47·3	0 37	16·6	17 17	911	855	0 25	56	2,2,2,1,2,2,2,3	16	1	88·0
11 d	15 20	*830*	231	6 15	*599*	15 28	*81·4*	32·1	1 50	*49·3*	14 17	*1147*	731	1 28	*416*	5,4,4,4,6,7,4,3	37	2	87·7
12	19 24	437	298	10 17	139	11 38	67·4	48·6	9 22	18·8	10 19	925	846	5 42	79	2,3,3,3,3,3,3,2	22	1	87·6
13	18 31	438	358	8 21	80	0 30	63·4	47·2	1 35	16·2	17 18	936	843	1 18	93	3,1,2,2,2,3,2,1	16	1	87·2
14	16 3	456	350	23 17	106	14 9	65·0	47·8	20 37	17·2	16 26	949	823	23 30	126	2,2,2,3,3,4,3,4	23	1	87·0
15 d	17 27	552	247	23 53	305	16 43	67·5	32·2	17 32	35·3	17 27	1016	782	23 53	234	3,2,3,3,3,5,5,5	29	1	87·4
16	19 10	458	294	0 0	164	13 34	67·1	37·9	1 20	29·2	18 39	934	745	0 39	189	4,3,2,3,3,2,3,3	23	1	87·4
17	18 4	447	327	1 11	120	0 58	61·0	49·2	3 59	11·8	19 53	924	794	1 23	130	4,3,2,2,2,3,2,1	19	1	86·6
18	17 47	426	357	11 20	69	15 4	62·9	49·3	6 18	13·6	18 6	915	886	10 0	29	2,1,1,2,1,1,1,0	9	0	86·0
19 q	17 39	423	351	11 36	72	14 20	65·7	48·6	5 45	17·1	18 11	913	891	1 25	*22*	1,1,1,1,2,2,0,2	10	0	85·6
20 d	20 59	448	320	23 47	128	14 8	71·6	40·7	6 43	30·9	20 30	944	766	24 0	178	1,2,3,3,3,2,3,5	22	1	85·7
21	20 0	427	*55*	1 0	372	0 57	71·6	38·4	1 42	33·2	19 57	925	*613*	1 30	312	6,3,3,2,2,2,2,3	23	1	85·6
22	16 33	425	353	12 11	72	12 25	61·8	49·1	6 52	12·7	21 51	910	880	0 0	30	1,1,2,2,3,2,2,2	15	1	85·4
23	18 42	454	370	10 26	84	15 57	66·4	49·8	5 44	16·6	18 9	930	830	0 55	100	3,1,2,0,2,3,3,2	16	1	85·5
24	19 15	462	364	3 46	98	15 25	63·9	48·4	19 10	15·5	20 15	919	842	4 52	77	2,3,2,1,1,2,3,3	17	1	85·5
25	19 56	479	333	1 40	146	23 3	69·9	34·2	19 49	35·7	14 13	998	769	23 19	229	3,3,3,2,4,3,4,5	27	1	85·0
26	19 28	437	295	24 0	142	12 53	65·1	34·1	22 28	31·0	22 13	926	781	24 0	145	3,1,2,1,2,2,1,5	17	1	84·6
27 d	15 55	457	254	0 22	203	13 35	65·4	*29·3*	1 20	36·1	16 40	948	723	0 27	225	5,3,3,3,3,3,3,5	28	1	84·6
28	19 43	458	301	5 10	157	12 46	63·8	47·4	4 16	16·4	17 11	926	782	0 0	144	4,3,3,2,3,3,3,3	24	1	84·9
29	19 55	415	325	0 57	90	24 0	67·1	47·5	7 44	19·6	17 27	921	790	1 4	131	4,3,2,2,2,2,2,3	20	1	85·0
30	18 30	441	349	9 31	92	0 5	68·4	48·6	23 54	19·8	18 22	932	832	0 21	100	4,2,2,2,3,2,2,2	19	1	86·1
31	16 2	429	344	10 27	85	1 20	65·1	48·0	0 15	17·1	19 0	927	832	1 42	95	3,2,2,1,2,2,1,2	15	0	86·8
Mean	- -	461	322	- -	139	- -	66·4	44·8	- -	21·5	- -	971	850	- -	121	2·4	18·7	0·74	86·1

q denotes an international quiet day and d an international disturbed day.

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

32 LERWICK (H) — 14,000γ (0·14 C.G.S. unit) + — AUGUST 1942

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	398	382	374	387	391	397	395	387	377	369	364	369	372	390	396	396	399	398	404	412	410	416	405	398	391
2	400	398	399	394	393	389	389	387	379	371	368	366	368	390	400	379	396	407	412	416	419	411	407	404	393
3	403	400	375	387	394	387	385	384	381	375	367	374	381	384	397	399	394	410	417	418	418	417	401	405	394
4 q	401	396	395	395	391	390	390	387	387	383	374	371	375	378	382	390	403	409	419	416	413	407	402	397	394
5	396	401	397	396	398	396	395	390	382	372	360	356	365	376	393	400	405	406	406	413	420	413	411	408	394
6	399	402	404	404	403	400	394	383	378	381	378	383	398	401	421	443	390	409	429	416	411	409	392	379	400
7	361	368	391	392	388	390	366	343	357	343	333	350	371	380	387	386	386	404	416	417	416	417	399	393	381
8 q	394	390	388	393	392	387	383	382	376	367	360	364	374	384	387	384	390	403	401	407	406	401	402	395	388
9	395	395	396	394	395	395	392	387	381	375	373	370	366	362	380	398	397	405	410	414	412	409	409	417	393
10 d	417	410	407	405	406	393	386	379	383	378	369	362	384	366	399	461	383	450	495	436	412	395	396	393	403
11	408	395	395	382	383	391	378	376	362	358	348	339	368	363	386	394	399	406	404	410	406	404	399	398	385
12	395	395	380	381	390	387	384	367	355	358	359	372	377	385	395	400	412	421	419	427	414	406	396	383	390
13 q	381	376	386	397	402	399	391	385	378	371	366	366	372	381	390	398	403	405	404	404	403	402	408	407	391
14	400	394	392	393	394	391	387	385	376	369	370	374	391	398	402	404	409	412	413	412	412	412	407	402	396
15	403	402	403	401	400	399	395	387	381	373	375	370	380	386	396	409	413	431	445	450	438	422	408	401	*403*
16 d	422	407	369	308	293	342	388	391	386	381	373	372	375	392	401	423	429	450	407	447	454	389	373	389	390
17	326	378	385	371	356	385	395	385	376	361	362	348	377	397	407	424	427	449	439	422	403	378	390	371	388
18 d	384	395	384	390	397	388	367	349	361	320	333	343	378	414	407	418	400	402	406	407	388	399	397	343	382
19 d	313	387	375	348	376	386	376	363	346	350	351	367	370	396	396	415	403	443	444	417	408	414	406	374	384
20	391	347	348	372	380	386	384	378	365	363	344	362	374	377	386	396	401	407	423	416	402	406	396	382	383
21	393	393	381	376	384	387	378	376	374	370	371	368	382	393	414	403	402	395	398	399	408	398	396	378	388
22	388	391	388	393	376	360	387	379	366	363	367	376	382	385	389	400	391	403	406	407	410	419	411	365	388
23 d	278	256	345	310	355	376	376	372	360	347	362	370	423	369	422	549	564	492	477	408	381	373	364	348	387
24	371	359	301	352	351	371	375	371	366	367	363	370	374	379	395	414	414	432	430	441	388	373	382	395	381
25	391	376	369	357	347	335	348	358	365	358	364	374	376	380	387	406	404	417	418	415	407	372	393	392	*380*
26	390	383	372	381	393	383	384	381	368	364	364	366	378	379	388	393	400	407	422	438	415	393	393	391	389
27	342	381	390	388	396	395	374	361	367	355	360	351	378	382	400	393	396	405	418	401	401	398	396	394	384
28 q	394	389	388	389	390	388	383	380	368	359	356	357	362	372	378	387	388	396	399	400	402	400	401	393	384
29 q	393	393	391	391	393	392	388	384	379	373	373	374	373	377	388	396	401	413	416	406	399	400	398	398	391
30	399	396	395	393	393	393	391	386	378	370	374	378	381	400	402	411	421	431	411	415	413	408	414	413	399
31	412	408	403	405	406	412	402	396	398	388	376	373	380	421	444	428	412	401	398	402	398	394	397	394	402
Mean	385	385	383	381	384	386	384	378	373	366	*363*	366	378	385	397	410	407	417	*420*	416	409	402	398	390	390

Corrections to be applied to all values: H, −6γ; D, −4·2′; V, nil.

MAGNETIC DECLINATION (WEST)

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

33 LERWICK (D) — 11° + — AUGUST 1942

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	55·0	53·7	51·8	48·6	51·1	50·5	52·2	52·7	53·9	54·1	54·9	58·5	61·8	62·3	61·5	59·7	59·0	58·4	58·1	57·9	55·1	54·7	54·6	55·2	55·6
2	56·3	55·5	54·5	53·2	51·3	50·8	50·4	48·8	50·5	52·9	55·5	58·0	61·4	63·5	64·8	62·9	61·8	60·4	58·7	57·9	55·3	57·5	55·1	57·8	56·5
3	53·9	49·2	48·3	50·8	50·8	51·8	53·4	51·5	51·5	53·9	57·0	59·8	63·4	64·6	63·9	61·3	57·7	58·4	58·8	56·7	57·5	56·6	57·8	56·9	56·1
4 q	53·4	52·3	52·9	54·7	54·5	52·4	52·2	52·2	52·0	54·4	56·0	58·9	60·2	61·0	61·0	59·9	59·6	59·0	58·9	56·9	55·8	57·0	56·0	53·7	56·0
5	53·3	56·8	53·8	53·1	52·4	52·8	51·9	51·2	51·8	53·5	54·8	58·4	61·6	63·1	62·5	61·8	59·1	58·0	57·3	56·0	57·4	53·6	52·5	51·8	55·8
6	53·6	53·2	52·3	52·2	52·4	51·8	52·3	51·7	51·5	54·4	57·4	60·9	64·4	66·8	65·9	66·7	64·2	61·4	61·1	59·3	52·4	54·7	55·2	46·7	56·8
7	51·0	54·6	51·6	51·4	51·8	49·7	51·6	53·5	55·8	56·7	57·8	61·7	63·6	64·5	64·6	63·0	60·9	57·2	53·6	57·5	55·0	45·4	53·1	54·4	55·8
8 q	54·7	53·8	55·6	54·0	53·7	52·9	52·6	52·5	53·4	55·0	56·6	59·2	61·4	61·6	60·9	59·6	58·3	56·9	56·6	56·5	56·5	56·3	54·3	54·2	56·1
9	54·9	54·9	54·6	54·5	53·6	51·7	50·6	50·5	51·7	55·0	58·5	61·1	61·8	63·7	62·6	62·6	61·4	57·0	53·4	56·0	57·3	58·1	57·8	57·7	56·7
10 d	57·0	56·0	56·4	52·4	50·3	49·0	50·2	55·8	54·7	55·1	58·6	59·9	62·6	66·0	65·6	68·3	63·5	60·5	55·7	39·8	52·7	50·7	49·0	58·8	56·2
11	55·5	53·6	52·5	53·1	55·6	54·3	51·1	51·1	52·7	54·5	59·6	60·8	61·5	62·5	60·8	58·4	55·6	55·2	56·4	56·8	57·4	57·4	56·6	56·4	56·2
12	54·4	56·6	55·5	57·1	56·5	52·0	54·1	54·9	57·9	61·5	62·5	64·3	65·3	63·7	60·6	58·8	56·3	55·9	57·8	58·3	56·9	57·0	53·1	51·6	57·6
13 q	50·9	57·6	54·5	51·6	50·3	50·9	50·4	50·3	51·4	53·5	56·6	58·9	60·1	60·4	59·6	58·0	56·5	55·5	55·7	56·5	56·6	56·4	56·9	54·4	55·1
14	54·7	54·7	52·3	51·9	52·2	51·6	51·5	51·9	54·5	58·3	61·7	63·6	64·1	62·2	59·7	57·8	56·3	55·9	55·7	56·0	56·2	55·7	55·6	56·7	56·3
15	56·1	56·1	55·9	54·5	52·5	50·6	50·7	51·3	52·5	54·8	57·7	62·4	64·4	62·2	60·5	60·4	59·6	59·7	60·3	62·1	61·4	55·7	52·6	52·6	56·9
16 d	51·0	48·5	38·1	48·4	53·2	47·8	52·0	46·7	48·6	51·5	56·9	60·5	63·9	66·0	66·4	65·2	64·2	63·6	64·0	65·0	33·0	47·2	51·7	47·2	*54·2*
17	48·3	46·4	48·1	49·3	49·5	48·5	49·5	51·1	53·6	53·9	56·5	60·9	59·6	62·4	63·5	64·6	58·5	55·7	57·4	55·8	54·0	59·5	48·6	54·3	54·6
18 d	52·5	53·0	53·3	54·3	51·8	49·6	50·8	58·0	55·5	55·6	57·4	60·8	61·6	62·0	64·7	61·7	62·6	60·9	58·7	57·5	51·9	56·5	59·6	58·6	57·0
19 d	58·3	54·6	56·3	56·7	54·0	50·5	49·8	52·4	51·3	49·8	54·7	60·9	62·2	63·3	63·5	61·9	54·4	56·5	47·9	55·5	54·5	51·1	51·7	55·9	55·3
20	49·5	56·1	56·4	49·3	51·4	49·8	48·8	49·8	49·7	53·7	59·6	64·2	67·5	66·2	63·3	60·5	59·6	58·7	58·4	53·2	55·5	57·4	54·9	57·5	56·3
21	54·9	54·3	55·8	57·1	53·0	52·9	50·4	52·2	52·3	53·4	57·5	61·4	64·2	64·8	58·2	58·4	57·1	54·8	55·5	54·1	52·8	55·9	57·4	58·5	56·1
22	59·2	53·7	49·6	51·9	53·8	57·8	54·5	50·6	52·2	52·6	55·9	59·1	60·2	60·4	59·1	58·9	57·3	57·0	57·3	57·0	57·1	51·1	46·6	55·4	55·3
23 d	55·9	62·3	51·7	60·2	56·4	52·1	51·0	49·9	52·1	54·3	58·3	61·2	66·3	67·4	69·6	58·7	58·1	60·6	61·3	44·4	54·9	56·9	41·4	42·5	56·1
24	53·6	54·4	59·2	53·1	50·6	51·5	50·4	50·9	51·2	53·4	57·2	60·3	63·0	64·1	61·7	60·0	53·5	53·9	52·4	49·1	44·8	49·6	54·5	56·1	54·5
25	54·5	55·5	52·7	56·5	54·0	54·6	50·1	49·1	49·5	53·1	57·2	60·6	63·3	62·6	60·8	59·7	57·5	54·2	52·6	52·4	51·6	54·0	55·9	53·0	55·2
26	55·9	55·5	57·6	53·3	52·5	49·6	51·0	49·8	51·9	53·5	56·6	61·0	64·0	65·0	61·9	59·8	57·3	56·3	57·3	46·6	54·7	52·6	50·9	50·6	55·2
27	57·8	56·5	51·4	50·6	52·8	52·7	52·9	53·6	53·0	53·1	55·2	59·2	61·5	62·6	59·5	57·8	57·2	52·9	52·8	55·6	56·4	55·5	54·9	55·3	55·5
28 q	55·1	53·8	53·1	52·5	52·4	52·2	51·0	51·0	51·4	54·2	56·1	58·3	59·4	60·1	59·2	58·3	57·3	56·7	56·4	56·2	54·9	54·1	54·1	54·4	55·1
29 q	54·4	54·0	53·7	53·5	53·1	52·4	51·9	52·1	52·2	53·5	54·9	57·3	60·2	62·0	61·9	60·2	59·2	57·4	56·5	57·1	55·6	55·9	54·6	54·6	55·8
30	55·1	54·0	53·7	54·2	53·7	53·5	52·5	51·6	52·5	55·0	58·3	62·7	65·3	67·4	67·6	66·6	64·1	64·4	60·7	56·9	57·1	53·1	53·6	53·8	*57·8*
31	59·0	52·0	49·8	49·4	49·8	49·8	52·3	53·5	52·3	52·6	57·2	61·3	64·7	66·2	63·9	64·3	63·0	59·7	58·6	57·7	57·0	55·4	53·2	52·8	56·5
Mean	54·5	54·3	53·0	53·0	52·6	51·6	*51·4*	51·7	52·4	54·2	57·2	60·5	62·7	*63·6*	62·6	61·2	59·1	57·8	57·0	55·4	54·5	54·6	53·7	54·2	55·9

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

34 LERWICK (V) — 46,000γ (0·46 C.G.S. unit) + — AUGUST 1942

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	880	869	864	876	884	891	897	901	903	903	899	894	890	891	893	898	904	906	908	907	911	900	896	893	894
2	893	894	898	902	903	903	905	904	900	895	889	886	887	889	897	906	905	905	911	912	901	905	901	879	899
3	864	855	854	868	882	893	898	903	903	900	898	895	896	901	900	910	914	913	916	916	913	899	882	874	894
4 q	886	892	897	899	893	893	894	897	894	893	892	891	886	889	893	897	898	901	900	907	913	907	906	902	897
5	897	889	882	891	895	898	899	902	902	902	899	897	895	892	893	900	902	908	909	908	905	907	901	884	898
6	889	892	894	898	900	899	901	901	897	891	891	887	883	884	889	915	958	936	919	922	924	906	900	864	902
7	841	821	832	870	882	890	891	891	881	885	891	882	887	894	901	911	913	918	923	912	909	861	871	884	885
8 q	894	898	902	898	903	905	905	902	901	901	897	890	886	887	895	901	901	902	906	903	904	906	901	900	899
9	901	902	903	904	902	903	906	902	898	891	885	884	899	905	909	925	937	939	934	916	907	904	902	897	906
10 d	901	902	897	895	890	891	894	891	891	896	890	890	894	902	898	909	971	949	1004	955	935	892	877	853	907
11	853	890	902	899	893	883	888	896	905	905	905	907	907	918	919	920	919	920	916	910	909	907	907	902	903
12	901	899	900	891	883	890	888	896	898	893	893	895	903	912	918	919	927	922	917	915	921	914	903	888	904
13 q	887	883	882	896	901	903	904	904	903	898	898	892	893	894	901	907	908	907	906	903	901	901	897	883	898
14	873	871	886	901	904	904	904	903	900	900	897	895	892	895	903	907	909	909	907	906	905	903	902	901	899
15	901	902	903	907	911	912	911	909	904	900	891	886	883	893	899	905	909	908	907	920	942	913	885	872	903
16 d	829	822	784	786	780	783	834	873	893	896	900	899	896	893	893	900	911	918	944	948	889	841	849	830	*866*
17	801	821	849	882	867	896	907	911	915	912	908	903	903	908	917	920	950	963	954	933	926	833	859	856	896
18 d	844	882	892	887	903	904	906	900	895	912	922	926	941	966	970	950	924	921	931	937	941	912	908	851	*914*
19 d	797	825	853	858	882	899	908	914	923	924	914	902	915	909	904	915	955	954	956	931	920	863	804	789	892
20	793	798	773	839	860	882	895	902	907	903	905	897	901	910	905	904	907	909	919	950	933	912	904	887	887
21	898	899	899	888	889	894	903	903	903	903	899	901	907	915	927	925	921	916	913	911	907	904	898	869	904
22	840	869	882	894	891	870	877	895	900	900	898	897	897	896	897	901	904	905	903	903	904	900	857	848	889
23 d	778	706	770	777	814	853	887	899	902	903	901	893	898	918	929	1006	1019	1020	991	927	908	885	832	825	885
24	861	865	851	855	879	888	900	905	910	910	908	902	903	908	915	924	954	952	946	907	894	828	837	820	893
25	865	893	894	876	833	837	855	894	909	902	900	897	903	909	916	921	921	926	921	917	909	868	853	892	892
26	890	894	887	884	894	896	903	904	902	897	898	899	905	914	918	918	924	924	919	917	883	872	857	848	898
27	813	830	876	899	906	909	910	909	906	905	905	913	916	923	935	938	925	922	919	919	913	909	907	903	905
28 q	901	903	909	910	912	913	914	913	910	908	906	900	893	896	902	908	910	910	910	909	908	905	901	902	906
29 q	903	905	907	909	909	910	912	913	908	904	900	899	897	897	900	908	910	910	913	915	914	899	899	900	906
30	899	897	896	902	905	908	909	908	903	897	888	886	885	884	889	897	899	902	907	910	910	905	900	897	899
31	878	872	883	882	881	880	886	883	878	882	885	892	900	914	968	968	966	965	957	936	926	919	898	894	908
Mean	*866*	869	874	881	885	890	896	901	901	900	898	896	898	903	909	917	925	925	*925*	919	912	893	884	874	898

Corrections to be applied to all values: H, -6γ; D, $-4{\cdot}2'$; V, nil.

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

35 LERWICK — AUGUST 1942

	TERRESTRIAL MAGNETIC ELEMENTS												3-hr. range indices *K*	Sum of *K* indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination			Vertical force							
	Maximum 14,000γ +		Minimum 14,000γ +		Range	Maximum 11° +	Minimum 11° +	Range	Maximum 46,000γ +		Minimum 46,000γ +		Range			
	h. m.	γ	γ	h. m.	γ	h. m.	′	′	h. m.	′	h. m.	γ	γ	γ				°A.
1	21 25	429	358	2 18	71	13 30	62·6	46·8	3 4	15·8	20 32	912	858	2 52	54	3,2,1,1,1,1,2,2	13	0	86·2
2	20 22	432	361	15 21	71	14 54	65·6	47·3	7 42	18·3	19 24	914	864	23 54	50	1,1,1,1,2,3,2,2	13	0	86·4
3	17 55	427	361	10 20	66	13 20	65·1	46·5	2 3	18·6	18 35	918	845	2 47	73	3,3,2,2,2,2,2,3	19	1	86·4
4 q	19 18	426	369	11 54	57	13 40	61·4	51·4	2 0	*10·0*	20 9	916	877	0 0	39	1,1,1,1,1,2,2,1	10	0	86·0
5	22 47	427	355	12 8	72	13 13	64·1	48·8	21 46	15·3	18 53	914	877	2 5	37	2,1,1,2,2,1,2,3	14	0	85·5
6	15 43	458	363	24 0	95	14 36	68·6	39·4	23 50	29·2	16 42	968	844	24 0	124	1,1,1,2,4,4,3,3	19	1	85·0
7	21 3	447	319	10 31	128	13 48	65·7	32·4	21 1	33·3	18 11	927	811	1 35	116	3,3,3,3,2,2,4,4	24	1	85·0
8 q	20 37	409	356	10 36	53	13 41	61·9	50·3	7 35	11·6	18 11	907	884	12 58	23	1,1,1,0,2,1,1,1	8	0	85·1
9	23 58	419	353	13 36	66	13 30	64·7	48·7	7 30	16·0	17 55	942	880	11 9	62	0,1,1,2,2,2,2,1	11	0	85·5
10 d	18 52	539	353	13 21	186	15 23	70·4	31·8	19 7	38·6	18 47	1043	830	23 58	213	2,2,2,2,3,5,5,4	25	1	86·2
11	0 35	415	329	11 49	86	13 29	63·0	49·1	7 10	13·9	17 13	923	832	0 0	91	3,2,2,2,3,1,1,1	15	1	86·0
12	19 9	436	351	10 30	85	12 37	65·8	49·7	22 54	16·1	16 44	933	879	4 49	54	3,2,2,2,2,2,2,2	17	1	86·0
13 q	23 8	417	364	10 55	53	1 36	60·9	49·5	7 13	11·4	17 26	908	872	2 9	36	3,1,1,0,0,0,0,2	7	0	86·0
14	17 25	416	367	9 38	*49*	12 27	64·6	49·6	3 8	15·0	17 8	911	867	1 6	44	2,2,1,1,2,1,0,1	10	0	85·8
15	20 4	463	364	11 5	99	20 13	67·5	47·5	23 14	20·0	20 36	962	853	22 52	109	0,1,0,1,2,2,3,3	12	1	86·0
16 d	20 7	535	*193*	4 5	342	19 57	71·3	*8·0*	20 22	*63·3*	19 56	977	721	4 1	256	4,5,4,2,2,3,6,4	30	1	86·0
17	17 0	475	309	0 15	166	21 20	68·2	40·7	0 59	27·5	19 1	974	786	0 14	188	4,3,2,3,3,4,3,4	26	1	86·1
18 d	15 8	461	297	9 34	164	14 28	71·3	47·4	0 6	23·9	14 40	990	807	0 1	183	4,2,3,3,3,4,3,4	26	1	86·0
19 d	18 35	481	273	0 17	208	14 17	65·0	27·8	18 33	37·2	18 28	979	770	23 14	209	4,3,3,3,3,3,4,4	27	1	86·0
20	18 34	442	320	2 3	122	13 10	70·0	43·0	0 45	27·0	19 46	955	764	2 30	191	4,4,2,3,3,2,3,2	23	1	86·1
21	14 26	440	358	10 50	82	13 27	65·9	49·4	6 27	16·5	14 54	930	861	24 0	69	2,2,1,2,3,3,2,3	18	1	86·5
22	22 5	460	333	24 0	127	0 14	65·2	41·4	22 2	23·8	20 51	908	825	24 0	83	3,3,3,3,1,2,1,4	20	1	86·5
23 d	15 50	*635*	223	0 25	*412*	14 28	*72·3*	21·8	23 4	50·5	15 46	*1072*	*680*	1 33	*392*	5,4,3,3,4,5,5,5	34	1	86·8
24	19 4	482	272	2 20	210	13 7	65·0	32·0	20 58	33·0	16 45	966	802	22 59	164	4,3,2,2,3,3,4,4	25	1	86·5
25	20 2	427	309	6 2	118	12 24	64·8	45·8	19 54	19·0	17 58	929	818	22 12	111	3,3,4,2,2,3,3,4	24	1	86·3
26	19 47	463	346	9 1	117	13 5	66·5	35·1	19 45	31·4	19 28	932	839	22 38	93	2,3,2,2,2,2,4,3	20	1	86·8
27	17 58	426	323	0 35	103	13 50	65·1	49·2	3 45	15·9	15 13	945	787	0 35	158	4,2,2,2,3,2,2,0	17	1	86·0
28 q	21 48	406	353	10 50	53	13 23	60·9	50·3	6 39	10·6	6 53	915	893	12 43	22	1,1,1,1,1,2,1,1	9	0	87·2
29 q	17 56	421	366	12 29	55	13 25	63·0	49·5	21 0	13·5	20 54	918	893	21 36	25	0,0,1,1,1,1,2,2	8	0	87·0
30	16 59	438	370	9 58	68	13 37	68·0	51·3	7 19	16·7	18 30	915	881	13 22	34	1,1,1,2,2,2,3,2	14	1	86·0
31	14 27	448	368	11 49	80	13 48	68·6	48·0	4 18	20·6	14 36	979	859	0 53	120	3,1,2,2,4,3,2,2	19	1	85·6
Mean	- -	452	333	- -	118	- -	65·9	42·9	- -	23·0	- -	945	834	- -	110	2·2	18·0	0·68	86·1

q denotes an international quiet day and d an international disturbed day.

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

36 LERWICK (H) — 14,000γ (0·14 C.G.S. unit) + — SEPTEMBER 1942

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	395	390	392	391	392	394	392	384	375	364	360	369	386	398	416	441	460	449	435	410	397	393	392	393	*399*
2	395	387	375	392	396	392	338	342	359	376	362	362	362	375	384	392	411	409	414	418	409	367	348	388	381
3	389	388	393	398	395	393	394	381	371	364	351	362	364	369	381	387	391	397	400	401	401	400	398	396	386
4	398	396	393	398	398	398	397	388	382	366	360	357	362	376	389	393	388	401	405	401	398	399	399	398	389
5	396	397	393	382	398	408	408	396	384	362	353	355	366	378	394	404	384	395	410	404	397	393	392	398	389
6 d	397	391	391	398	403	398	390	387	369	365	371	370	385	387	390	430	427	415	416	391	392	392	381	374	392
7	387	389	392	388	375	381	379	373	369	364	362	375	384	387	398	409	410	410	397	395	396	397	404	387	388
8	387	383	376	368	380	388	389	387	389	384	380	371	375	381	394	401	398	389	394	396	396	395	396	398	387
9	396	396	397	396	394	393	388	384	372	369	370	368	387	392	400	396	399	391	389	396	396	400	400	397	390
10	396	400	390	387	391	396	394	376	370	363	358	362	376	381	381	388	391	399	398	400	402	396	399	396	387
11 d	396	404	400	401	398	392	398	396	391	373	368	376	385	396	391	405	414	447	438	446	415	381	317	253	391
12 d	193	289	303	220	274	370	320	293	285	299	316	371	385	401	401	418	444	416	403	397	431	415	374	353	*349*
13	306	327	367	377	374	381	388	384	374	355	367	375	384	384	404	404	414	412	425	401	389	379	379	364	380
14	317	325	291	330	349	368	379	372	362	374	375	370	381	373	389	402	432	437	421	401	402	350	382	278	369
15	324	375	374	342	278	359	381	391	386	382	365	373	385	393	406	425	420	429	422	396	403	397	398	396	383
16	381	370	371	381	388	350	384	383	376	356	352	364	378	388	394	397	411	410	399	398	402	427	372	300	381
17 d	370	357	374	393	393	384	375	371	367	355	311	321	359	372	400	416	425	450	406	387	383	396	340	383	379
18	348	345	329	373	357	376	373	371	372	374	365	371	373	387	391	374	412	401	424	382	390	387	338	384	375
19	375	320	339	319	365	378	373	376	379	367	359	374	383	370	396	378	411	420	399	392	395	490	392	385	377
20	382	370	384	380	375	379	390	385	378	365	361	371	345	376	396	396	398	387	391	407	389	391	350	374	380
21 d	370	354	294	360	329	333	372	372	344	305	340	365	388	401	395	396	413	417	423	396	387	386	388	390	372
22	385	382	379	355	323	307	358	379	368	351	356	362	367	378	397	394	403	380	390	387	394	401	383	338	372
23	387	393	386	383	385	386	381	372	363	364	368	372	380	387	392	394	389	392	395	397	397	393	392	390	385
24	390	383	376	385	386	384	383	380	377	370	364	362	376	376	384	379	383	387	394	396	390	392	395	387	382
25 q	385	384	382	382	385	386	392	390	383	369	362	358	362	372	370	382	390	393	392	395	396	401	404	400	384
26 q	392	393	391	391	391	393	396	393	387	368	354	348	352	370	382	382	390	386	394	400	396	396	396	397	385
27	394	397	397	395	390	394	394	389	382	372	366	359	365	370	371	377	386	397	398	404	400	390	418	389	387
28 q	390	387	392	387	390	392	392	385	379	373	362	359	356	362	380	393	396	391	396	398	398	395	389	395	385
29 q	400	391	389	390	392	396	397	396	387	373	361	358	362	371	381	389	400	397	393	396	397	397	397	396	388
30 q	395	396	394	393	393	396	395	390	383	368	354	359	363	370	378	387	394	401	395	384	389	391	393	398	386
Mean	374	375	373	375	375	381	383	379	372	363	*358*	364	373	381	391	398	406	*407*	405	399	398	394	384	376	383

Corrections to be applied to all values: H, -6γ; D, $-4{\cdot}2'$; V, -2γ.

MAGNETIC DECLINATION (WEST)

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

37 LERWICK (D) — 11° + — SEPTEMBER 1942

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	54·1	54·3	54·5	53·5	53·5	51·4	50·5	49·9	50·8	53·7	56·4	60·7	66·2	66·1	69·6	71·6	68·1	63·1	55·7	53·5	53·4	53·6	54·7	55·0	57·2
2	55·3	56·0	61·3	54·6	50·6	49·6	55·2	64·4	57·4	53·6	57·4	59·6	61·3	62·2	60·6	59·4	59·3	58·7	57·9	58·2	57·4	61·4	60·4	48·5	57·5
3	49·5	50·6	52·2	52·5	50·3	51·1	50·3	49·3	49·5	51·7	56·6	60·2	63·8	63·3	61·3	58·4	56·0	55·1	55·0	55·2	55·2	55·0	54·3	53·8	54·6
4	53·8	53·8	52·4	52·4	51·9	51·0	50·0	49·8	50·6	54·4	57·7	61·3	64·6	65·7	64·9	63·4	59·1	53·8	50·6	47·5	52·7	53·5	54·4	55·4	55·2
5	55·9	56·2	53·5	54·6	55·9	51·7	52·4	51·2	53·1	56·6	60·3	61·4	63·2	64·0	63·3	61·4	61·8	57·3	56·3	55·2	47·8	53·2	54·1	55·2	56·2
6 d	55·3	60·2	50·2	49·7	51·4	52·1	56·5	60·9	61·7	62·8	60·1	61·0	62·3	66·0	65·4	61·3	58·2	54·6	52·1	57·7	57·4	55·7	53·3	49·3	57·3
7	50·9	52·1	52·0	52·5	54·5	52·7	53·6	53·5	53·8	56·9	58·1	59·3	59·8	59·5	59·3	58·7	51·1	53·2	57·7	58·1	57·4	53·8	48·1	50·1	54·9
8	49·1	53·8	54·7	57·7	54·1	55·5	56·1	58·3	56·1	54·8	55·3	58·6	58·6	58·7	58·3	57·4	56·9	55·8	56·6	56·5	55·9	54·8	54·8	54·5	56·0
9	54·2	54·4	54·9	54·9	54·9	52·4	51·5	51·6	52·2	52·7	54·8	56·7	58·5	59·6	60·3	58·6	57·1	56·4	52·8	53·9	54·8	55·3	55·0	54·4	55·1
10	54·6	55·5	54·8	60·3	53·5	52·0	50·2	52·1	52·8	54·4	57·2	60·0	62·5	63·7	62·6	60·1	59·4	57·3	55·9	55·8	55·1	53·3	52·6	50·8	56·1
11 d	53·0	52·6	50·6	50·3	51·3	53·4	53·8	53·1	54·1	56·1	57·5	61·6	65·7	67·7	70·5	67·6	64·7	66·3	60·0	52·3	51·5	51·4	50·7	72·3	*57·8*
12 d	34·9	37·6	49·3	46·4	49·7	53·5	56·0	68·1	63·5	56·8	55·5	58·9	61·5	57·8	60·5	62·5	49·2	53·3	58·1	56·4	49·2	47·5	47·1	50·1	53·5
13	55·2	56·8	51·8	47·6	50·7	51·5	52·4	50·7	51·0	53·8	53·2	55·2	58·5	60·5	62·7	63·7	60·1	57·4	51·3	37·9	39·8	53·3	50·1	50·0	53·1
14	43·4	51·0	52·2	51·3	52·7	51·1	51·7	51·2	53·8	52·2	55·8	57·2	58·2	58·1	60·9	59·0	51·5	43·5	56·3	55·3	49·5	45·6	52·4	52·0	52·7
15	57·3	54·8	48·1	51·7	54·8	53·6	53·2	50·4	51·7	52·9	54·4	56·0	58·5	62·7	56·2	57·0	59·2	54·9	46·6	57·4	56·2	54·4	54·4	53·0	54·6
16	52·3	60·5	59·3	53·2	50·1	53·7	54·9	50·9	50·7	52·5	53·4	57·4	62·1	61·5	60·8	59·4	58·1	56·1	55·6	54·4	53·4	46·2	43·0	46·0	54·4
17 d	48·1	55·2	55·4	52·5	51·6	51·7	49·5	47·4	48·8	52·3	51·1	53·3	61·2	63·5	63·9	58·3	60·0	47·6	40·7	46·7	48·5	49·5	54·7	51·3	*52·6*
18	50·4	58·6	57·6	54·4	51·9	51·4	53·3	52·3	52·4	54·1	54·9	57·4	58·8	60·8	63·6	60·4	56·8	57·3	33·3	48·1	55·4	51·8	61·6	52·2	54·5
19	47·6	56·2	54·1	55·4	52·8	50·1	54·3	51·6	52·7	56·4	56·6	58·5	61·6	63·8	61·0	59·9	61·4	45·4	49·2	53·8	55·2	52·5	51·8	53·7	54·8
20	55·1	59·3	50·7	52·5	54·9	55·4	53·1	53·5	52·8	54·2	56·6	60·9	61·4	58·7	63·3	59·3	57·8	55·6	49·9	47·6	45·8	45·5	52·1	57·3	54·7
21 d	55·3	47·1	57·4	56·2	52·0	63·2	55·6	50·5	53·6	54·3	58·3	60·4	62·3	53·6	60·0	59·6	57·2	49·1	47·7	49·5	52·9	56·1	57·6	55·7	55·2
22	54·8	54·3	53·6	54·4	57·1	54·7	52·5	52·1	52·8	56·5	57·1	60·3	59·3	59·9	59·6	58·8	57·0	51·3	51·7	55·6	53·8	51·7	45·6	52·0	54·9
23	52·1	48·3	47·6	52·5	52·4	52·3	52·3	52·7	53·0	54·4	57·1	59·4	60·3	59·2	58·2	57·6	57·4	56·8	56·2	56·0	55·6	55·1	54·1	55·5	54·8
24	49·9	43·0	47·3	53·0	53·3	52·4	52·1	51·7	53·2	53·6	57·4	60·1	62·0	60·9	60·5	57·5	54·9	55·3	55·5	55·0	53·7	54·7	51·5	51·6	54·2
25 q	52·7	53·1	55·3	54·9	52·6	53·6	51·5	50·4	50·5	52·0	54·4	57·4	59·0	60·2	59·4	59·2	58·3	56·4	56·3	55·8	55·1	53·2	49·7	51·3	54·7
26 q	52·4	53·9	54·1	53·7	53·2	53·0	52·5	52·0	51·7	53·3	55·9	59·7	63·7	65·9	67·1	66·0	62·8	56·8	55·6	56·1	54·9	53·3	55·5	50·1	56·4
27	52·4	53·7	52·5	51·5	51·4	50·1	48·5	50·7	52·1	52·9	56·2	59·4	64·5	64·3	62·8	62·7	58·5	57·4	56·2	55·6	55·4	52·5	47·7	45·6	54·8
28 q	50·2	53·4	54·3	52·5	53·3	52·4	51·7	51·3	51·7	52·7	54·9	58·6	62·2	61·4	60·5	58·4	57·5	55·8	55·5	55·2	54·7	49·4	48·6	49·3	54·4
29 q	51·1	52·4	53·1	53·0	53·1	52·4	51·2	49·7	49·9	51·4	54·3	57·8	60·9	63·4	63·5	62·4	60·4	59·2	55·5	55·0	54·2	53·6	53·5	53·5	55·2
30 q	53·6	53·5	53·5	53·5	53·5	52·9	53·0	51·2	50·4	52·0	53·4	58·0	60·5	61·4	60·6	59·4	57·8	56·5	55·8	53·4	54·2	54·4	54·0	54·5	55·0
Mean	*51·8*	53·4	53·3	53·1	52·8	52·7	52·6	52·7	52·9	54·2	56·1	58·9	61·4	61·8	*62·0*	60·6	58·3	55·2	53·3	53·6	53·2	52·7	52·6	52·8	55·1

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

38 LERWICK (V) — 46,000γ (0·46 C.G.S. unit) + — SEPTEMBER 1942

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	892	896	903	905	906	908	910	910	909	904	900	894	894	908	917	948	1008	1026	1018	974	953	926	909	898	*926*
2	905	906	877	886	899	900	905	874	873	886	894	893	894	899	904	905	908	914	914	916	923	881	802	854	892
3	889	900	900	897	894	901	908	911	911	910	908	903	903	905	905	910	910	910	907	907	906	906	907	906	905
4	904	900	902	903	906	908	908	909	907	909	908	905	904	901	900	904	909	914	922	926	917	911	906	905	908
5	905	899	893	892	861	865	878	890	896	902	904	906	906	910	918	929	935	923	916	923	934	921	914	906	905
6 d	903	878	861	870	876	883	887	883	891	894	892	895	900	917	959	1012	975	949	945	935	923	911	811	815	903
7	876	892	900	899	898	893	890	894	897	899	903	903	906	910	911	917	945	946	924	913	910	909	891	889	905
8	894	894	878	863	875	877	879	883	887	900	905	906	910	909	906	908	920	926	917	910	908	908	908	906	899
9	907	908	906	901	899	898	902	903	904	905	904	904	900	906	906	908	911	915	916	911	910	905	905	905	906
10	906	896	896	883	885	895	897	899	898	898	896	894	894	903	911	918	925	926	925	919	914	911	889	893	903
11 d	895	885	893	898	900	903	895	897	897	895	896	893	893	902	907	908	909	927	970	971	945	900	745	635	890
12 d	608	676	818	794	776	846	850	841	869	894	918	946	941	948	931	937	971	953	928	933	903	857	849	850	*868*
13	781	786	824	868	892	900	902	910	914	918	914	911	909	908	909	923	946	949	951	952	929	924	874	793	895
14	787	792	795	822	878	890	908	918	917	914	915	913	916	922	922	947	962	970	956	852	831	828	806	763	880
15	788	810	838	860	811	848	885	905	911	910	916	916	911	918	948	954	969	969	952	931	911	897	891	883	897
16	900	876	835	846	854	843	863	886	899	908	909	907	909	911	909	913	916	949	950	936	916	870	835	811	890
17 d	824	853	878	891	902	906	899	912	921	920	942	954	938	943	954	986	987	986	943	927	927	851	757	787	908
18	829	847	848	867	889	914	911	920	921	919	922	922	915	909	923	946	956	958	953	932	900	847	793	802	898
19	815	824	823	810	845	866	876	883	896	912	918	916	912	918	928	933	946	957	943	933	928	885	866	884	892
20	874	865	875	890	892	886	897	905	907	911	911	916	933	924	925	936	946	947	938	893	877	884	867	781	899
21 d	835	838	813	815	836	854	859	894	907	922	915	918	934	960	926	923	955	963	927	909	915	874	874	871	893
22	882	875	890	892	844	839	851	886	898	902	911	919	936	933	924	920	921	946	931	924	915	885	863	799	895
23	835	876	891	905	906	905	907	908	907	907	906	904	905	909	914	916	914	911	909	909	909	911	912	898	903
24	853	876	897	901	906	909	910	910	906	906	906	906	904	908	912	921	924	917	911	910	915	910	905	904	905
25 q	904	908	909	905	903	907	906	907	906	907	906	905	907	908	910	911	916	922	919	916	915	911	898	882	908
26 q	890	898	908	911	912	911	910	910	907	907	904	899	899	902	912	932	950	975	938	922	920	913	885	891	913
27	903	907	909	909	911	907	906	906	906	907	906	907	909	920	930	933	928	921	917	915	922	927	886	892	912
28 q	900	897	895	900	905	910	912	915	911	909	909	908	911	908	907	911	918	920	917	915	916	918	913	896	909
29 q	891	898	903	908	910	911	911	911	912	911	909	905	901	899	906	911	914	921	927	920	915	911	909	908	909
30 q	908	907	908	909	910	910	910	911	911	909	905	897	894	894	900	903	906	910	918	930	922	916	912	903	908
Mean	863	869	876	880	883	890	894	900	903	907	908	909	910	914	918	927	937	*941*	933	922	914	897	869	*857*	901

Corrections to be applied to all values: H, -6γ; D, $-4{\cdot}2'$; V, -2γ.

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

39 LERWICK — SEPTEMBER 1942

	TERRESTRIAL MAGNETIC ELEMENTS												3-hr. range indices *K*	Sum of *K* indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination			Vertical force							
	Maximum 14,000γ +		Minimum 14,000γ +		Range	Maximum 11° +	Minimum 11° +	Range	Maximum 46,000γ +		Minimum 46,000γ +		Range				
	h. m.	γ	γ	h. m.	γ	h. m.	′	′	h. m.	′	h. m.	γ	γ	h. m.	γ				°A.
1	17 9	475	348	11 3	127	15 17	74·3	49·5	7 10	24·8	17 30	1042	889	0 46	153	1,1,0,2,3,4,4,3	18	1	85·1
2	19 13	428	305	21 59	123	21 55	67·9	46·6	23 21	21·3	20 47	930	782	22 31	148	3,2,4,2,2,2,2,5	22	1	85·6
3	4 2	405	346	10 46	59	12 56	64·3	47·9	0 18	16·4	7 38	914	862	0 0	52	2,1,1,2,1,1,0,0	8	0	86·0
4	18 11	416	352	11 10	64	13 43	66·9	44·1	19 11	22·8	19 4	931	897	14 26	34	1,1,1,2,2,3,3,1	14	0	85·8
5	15 20	418	345	10 57	73	13 3	64·4	46·0	20 7	18·4	20 8	946	849	4 35	97	2,3,2,1,2,3,3,2	18	1	85·6
6 d	15 46	454	315	23 17	139	13 42	68·6	35·0	22 55	33·6	15 47	1034	743	23 5	291	3,2,3,3,4,4,3,5	27	1	86·0
7	16 55	426	358	10 38	68	14 36	60·8	43·7	16 48	17·1	16 49	963	857	0 0	106	3,2,1,2,2,3,1,3	17	1	85·6
8	15 47	419	357	3 12	62	7 10	59·6	48·0	0 33	11·6	17 36	930	857	3 31	73	2,2,2,2,1,3,1,0	13	0	85·1
9	14 35	407	355	11 26	52	14 34	60·9	50·5	7 45	*10·4*	18 22	920	896	4 35	*24*	0,1,1,2,1,2,2,0	9	0	85·0
10	18 6	406	355	10 56	51	13 28	64·2	49·2	23 13	15·0	17 5	928	868	3 50	60	2,3,2,1,3,2,1,2	16	0	85·1
11 d	17 21	476	*18*	23 56	*458*	23 42	*85·2*	32·2	22 11	*53·0*	19 53	990	598	23 43	392	2,2,1,2,3,4,3,7	24	2	85·0
12 d	20 42	482	25	0 0	457	7 23	74·3	*25·7*	0 12	48·6	16 34	985	*562*	1 7	*423*	6,7,5,5,3,4,4,4	38	2	85·0
13	22 30	463	261	0 33	202	14 37	65·5	32·5	19 38	33·0	18 52	963	747	0 34	216	4,3,2,3,3,3,4,5	27	1	85·1
14	19 13	473	192	23 43	281	19 31	76·7	34·6	19 52	42·1	17 5	978	733	23 47	245	4,4,3,3,3,4,5,5	31	1	85·2
15	17 48	454	225	0 0	229	20 32	65·4	36·9	18 13	28·5	17 46	980	759	0 0	221	5,5,3,3,3,4,4,2	29	1	85·0
16	16 59	442	254	23 30	188	12 14	64·5	33·8	23 1	30·7	17 42	974	778	23 41	196	4,3,3,2,2,3,3,5	25	1	84·3
17 d	17 34	*508*	282	10 53	226	14 31	68·1	28·2	17 42	39·9	17 35	*1046*	734	22 28	312	4,2,2,3,3,5,4,5	28	1	84·0
18	18 29	450	307	22 38	143	22 30	72·0	28·8	18 28	43·2	18 3	991	751	22 44	240	3,4,2,3,3,4,5,4	28	1	83·6
19	17 22	458	275	3 9	183	13 22	65·4	37·2	17 18	28·2	17 5	981	792	3 20	189	4,4,3,3,3,4,3,3	27	1	83·4
20	14 10	434	268	23 0	166	14 8	64·6	39·4	19 35	25·2	17 48	953	748	23 18	205	3,3,2,3,4,3,3,5	26	1	83·4
21 d	18 29	491	227	2 18	264	5 40	67·2	31·7	18 29	35·5	16 48	992	797	2 58	195	5,3,3,4,3,4,4,3	29	1	83·2
22	16 49	418	263	5 10	155	11 30	63·5	41·9	22 5	21·6	17 24	954	769	23 36	185	2,4,3,3,3,3,2,4	24	1	83·0
23	18 36	404	353	8 37	51	12 1	61·4	45·3	2 6	16·1	15 2	916	792	0 0	124	4.2.2.2.1.1.1.2	15	0	83·0
24	22 30	405	358	11 26	*47*	12 24	63·2	42·1	1 51	21·1	16 40	925	843	0 30	82	3,1,1,1,2,1,1,2	12	0	82·8
25 q	22 3	411	355	11 43	56	13 23	61·3	48·7	22 30	12·6	17 42	925	878	23 45	47	1,1,1,1,2,1,1,2	10	0	82·0
26 q	23 44	403	346	11 29	57	15 0	67·4	48·4	23 18	19·0	17 31	984	874	22 38	110	2,1,1,1,2,3,3,3	16	0	81·4
27	22 15	457	354	11 13	103	13 30	66·2	44·0	23 26	22·2	15 38	937	869	22 21	68	1,1,2,1,2,2,2,3	14	0	81·1
28 q	15 57	404	350	12 40	54	12 23	64·0	46·6	22 6	17·4	21 30	922	890	23 24	32	2,1,1,1,2,2,0,2	11	0	81·5
29 q	17 22	407	350	11 27	57	13 43	65·1	48·7	7 51	16·4	18 27	928	887	0 46	41	1,1,1,2,2,1,1,0	9	0	82·1
30 q	23 3	408	351	10 53	57	14 4	62·0	49·4	8 44	12·6	19 42	933	892	13 10	41	0,0,1,2,1,1,2,2	9	0	82·7
Mean	- -	437	295	- -	142	- -	66·5	41·2	- -	25·3	- -	960	806	- -	153	2·5	-	0·63	84·1

q denotes an international quiet day and d an international disturbed day.

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

40 LERWICK (H) — 14,000γ (0·14 C.G.S. unit) + — OCTOBER 1942

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1 q	392	391	391	391	391	393	392	388	380	371	367	367	374	379	387	388	394	397	397	398	399	401	395	400	388
2 d	397	386	386	400	407	417	415	411	398	356	368	383	383	366	405	649	467	470	473	421	370	368	356	350	*408*
3 d	271	233	227	247	216	354	350	337	353	362	356	360	373	363	391	464	455	422	405	382	357	354	380	360	349
4	364	336	352	380	361	359	371	360	358	364	358	371	375	397	412	434	468	407	385	384	379	359	321	359	376
5	329	337	352	338	386	379	376	371	358	358	351	347	363	376	399	377	369	390	387	388	383	381	384	366	369
6	365	384	386	385	384	383	387	385	374	370	364	363	365	370	376	381	383	387	394	394	385	377	383	382	379
7	382	340	314	379	393	396	378	390	389	371	366	363	367	368	371	390	392	386	385	388	385	381	389	383	377
8	380	381	379	372	387	393	396	394	383	366	358	355	358	362	378	383	392	394	382	372	380	388	388	388	380
9 q	376	358	387	390	388	381	393	394	387	373	369	373	377	385	385	396	395	401	400	400	401	401	397	396	388
10	397	396	396	397	401	403	400	405	397	383	372	377	380	388	395	405	402	402	404	401	401	388	386	389	394
11	388	386	387	388	389	390	390	387	381	367	365	364	368	380	394	394	394	401	407	417	425	390	395	399	389
12 d	380	378	316	354	385	392	392	389	380	364	315	351	384	385	389	383	391	407	388	382	385	388	406	400	379
13	380	318	314	348	377	377	377	377	367	354	355	368	374	375	389	379	414	422	374	376	385	402	395	365	373
14	371	353	362	366	376	377	381	380	371	366	363	362	355	361	403	408	381	382	386	409	372	306	330	354	370
15	366	366	364	366	312	344	386	381	370	365	371	371	368	378	374	384	393	388	394	389	372	379	365	374	372
16	362	262	368	377	382	383	384	385	373	366	358	367	370	380	380	388	373	385	421	382	389	396	385	388	375
17	359	371	378	385	373	373	389	388	374	366	367	373	377	387	389	386	388	393	391	389	388	400	384	383	381
18	382	379	369	371	374	384	384	375	371	368	371	367	379	383	390	399	384	389	378	377	374	387	380	379	379
19	273	241	371	366	357	374	354	374	369	368	347	364	370	389	417	453	380	408	386	375	383	380	384	385	369
20	371	363	380	372	373	380	388	382	377	368	368	370	367	388	370	399	395	377	384	386	378	381	380	382	378
21	382	382	383	383	382	385	388	389	378	373	370	369	373	366	383	393	372	378	382	384	384	379	380	379	380
22 q	380	380	376	376	382	388	387	384	375	369	368	368	366	374	381	384	388	391	391	385	387	385	388	387	381
23 q	389	386	382	386	389	394	390	380	371	359	365	368	379	378	385	387	392	390	391	392	392	392	392	394	384
24 q	392	389	388	390	391	390	390	385	377	370	369	374	378	381	386	387	394	397	396	399	397	395	388	392	387
25	393	390	379	386	403	405	399	383	399	391	381	374	373	380	380	385	390	392	391	388	388	388	385	386	388
26	385	381	379	381	382	388	393	392	388	376	370	368	371	376	380	385	388	392	393	394	408	419	380	383	385
27	382	378	380	388	395	391	392	395	388	373	370	371	374	380	389	385	384	391	393	395	392	401	394	391	386
28 d	392	392	393	393	396	397	399	397	393	379	363	375	385	396	450	713	734	856	730	414	155	−43	127	−179	392
29 d	327	351	326	313	339	318	284	190	302	345	350	406	437	363	366	389	447	478	396	392	293	144	307	307	*340*
30	258	283	255	331	372	347	360	381	359	340	332	351	369	395	408	462	402	394	386	373	383	382	366	385	361
31	332	342	348	351	376	372	377	374	375	365	354	340	356	375	407	394	381	377	406	376	378	348	371	381	369
Mean	364	*355*	360	369	375	381	382	378	375	367	361	367	374	378	391	*416*	409	414	406	390	376	361	370	361	378

Corrections to be applied to all values: H, −6γ; D, −4·2′; V, −3γ.

MAGNETIC DECLINATION (WEST)

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

41 LERWICK (D) — 11° + — OCTOBER 1942

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1 q	53·7	53·7	53·3	53·2	53·7	53·5	52·6	51·8	51·8	52·5	54·4	56·6	58·3	58·5	59·1	58·5	56·9	56·6	56·1	55·7	54·2	52·1	53·2	50·2	54·6
2 d	47·9	49·6	50·7	50·3	51·7	51·8	52·1	52·6	53·1	54·6	59·0	63·4	69·2	74·7	71·0	62·0	62·2	47·4	54·0	47·5	55·1	46·5	49·5	53·4	55·4
3 d	65·4	57·0	55·9	42·9	55·3	55·7	63·6	63·4	62·5	58·5	57·5	57·5	57·8	60·0	58·9	46·4	51·8	46·4	41·4	47·6	46·5	49·5	55·6	57·8	54·8
4	48·4	52·9	54·1	49·6	50·1	56·2	60·1	55·0	52·3	57·1	56·6	57·3	57·4	53·5	57·1	55·2	47·3	47·7	53·2	47·4	49·0	52·6	52·7	47·5	52·9
5	49·2	53·3	50·8	56·8	53·6	54·2	50·5	54·8	54·8	54·5	57·1	59·3	61·1	59·5	49·8	57·8	53·8	50·9	54·9	54·6	46·2	48·6	53·0	53·4	53·9
6	54·6	53·4	52·9	52·6	53·2	53·3	53·5	53·7	53·6	53·7	55·6	56·9	57·5	57·1	56·3	55·5	54·6	54·6	54·1	54·6	52·3	51·8	51·2	49·4	54·0
7	51·0	47·2	53·7	50·4	49·3	50·1	54·7	55·9	55·1	55·0	55·5	57·6	60·2	63·0	60·8	51·5	56·7	56·3	55·8	50·8	49·8	49·8	45·2	43·9	53·3
8	52·9	53·7	54·2	56·4	54·2	53·1	52·6	52·1	53·1	54·2	57·2	60·1	61·7	60·7	59·3	58·7	57·2	65·9	48·4	49·0	51·5	50·3	52·2	52·0	54·7
9 q	52·2	55·8	51·1	52·1	51·9	52·5	53·7	53·2	53·1	54·0	56·5	59·4	60·4	62·5	62·0	61·5	60·1	58·6	57·1	54·3	54·0	53·2	52·9	53·6	55·7
10	53·5	53·7	53·4	53·1	53·1	53·1	52·5	51·9	51·4	51·6	53·1	56·4	58·4	59·7	59·9	59·2	58·1	56·8	56·4	55·2	55·5	49·7	49·2	49·7	54·4
11	52·7	52·4	53·2	53·2	53·3	53·0	52·9	52·1	51·1	51·4	53·3	57·9	60·4	61·8	62·4	63·0	60·2	60·3	57·2	59·9	51·4	42·6	50·4	54·7	55·0
12 d	54·7	54·0	56·2	52·5	55·0	53·1	50·8	50·8	50·1	53·5	52·7	57·5	60·2	60·5	63·9	63·3	59·7	47·0	49·4	55·6	55·3	52·5	50·6	48·8	54·5
13	43·9	48·8	52·1	50·6	51·7	52·8	53·7	51·8	52·1	51·0	51·9	56·6	59·5	60·9	63·6	56·8	57·0	22·6	53·9	57·6	52·8	48·8	53·7	49·7	52·2
14	48·6	53·1	58·8	53·7	54·3	54·2	55·5	54·0	52·8	53·6	54·8	57·6	59·5	56·8	59·3	42·2	57·6	58·7	47·7	35·6	34·0	36·9	43·5	54·9	51·6
15	56·9	54·5	58·5	52·3	57·8	57·7	59·6	51·6	52·2	49·9	53·8	57·5	59·7	61·6	61·4	58·7	55·6	50·3	27·6	39·7	49·0	51·8	59·5	46·3	53·5
16	42·8	52·3	49·0	48·0	51·2	51·3	52·5	54·5	53·3	54·1	56·6	57·7	60·5	54·1	58·0	55·4	53·5	55·1	44·2	50·0	52·4	50·1	51·3	53·7	52·6
17	57·5	55·0	53·1	51·7	53·0	56·3	53·4	54·4	52·1	53·5	55·6	58·4	60·4	60·3	58·9	58·2	53·9	53·0	55·7	52·9	41·1	47·2	52·7	52·8	54·2
18	55·8	55·3	55·7	54·0	52·7	51·4	51·7	52·6	54·5	53·4	55·5	57·3	58·1	58·8	59·4	58·1	49·8	40·4	40·3	50·4	55·7	49·0	50·5	55·2	53·1
19	56·6	63·5	46·3	47·7	52·6	52·2	54·9	55·7	56·2	55·4	58·9	60·8	61·4	57·9	63·1	49·9	54·8	39·3	45·0	54·3	50·7	49·1	52·6	53·4	53·8
20	54·5	57·2	53·2	54·1	51·9	51·5	51·8	52·6	52·9	53·1	56·6	57·7	56·3	58·6	47·1	39·7	51·5	51·4	49·3	51·6	53·7	53·3	53·6	54·1	52·8
21	53·7	53·6	53·2	53·2	53·1	53·0	52·2	51·7	51·4	52·6	54·6	57·3	59·1	58·5	55·7	60·1	48·0	55·5	55·2	54·3	53·2	51·6	51·8	53·5	54·0
22 q	55·5	54·1	52·5	52·4	52·8	52·6	52·1	51·7	51·8	53·7	57·0	58·4	59·3	57·0	55·7	55·2	55·0	55·1	53·7	53·8	52·3	51·0	51·3	52·5	54·0
23 q	52·4	51·6	52·5	53·3	53·0	52·5	52·4	52·8	53·1	55·3	59·0	61·0	63·7	61·9	58·1	56·0	55·9	57·0	56·3	55·3	54·1	52·9	52·5	51·5	55·2
24 q	53·1	52·6	53·1	52·5	52·0	52·3	52·4	51·8	51·1	51·9	54·4	56·8	58·4	57·8	57·1	55·1	55·1	55·1	54·7	54·5	54·3	52·5	51·6	52·3	53·9
25	52·7	53·5	54·3	54·4	54·7	58·2	61·8	60·5	57·5	54·1	54·2	57·9	59·2	59·6	60·7	60·4	57·1	56·0	55·5	54·0	53·9	52·6	50·6	49·7	*56·0*
26	50·8	52·4	55·6	51·0	50·2	52·9	51·9	52·1	50·7	51·1	53·2	55·9	57·2	57·4	56·3	56·1	55·5	55·2	55·1	55·0	44·4	47·5	50·0	52·7	52·9
27	58·5	59·5	52·6	51·8	51·3	52·7	52·3	51·7	51·0	51·5	53·3	55·6	57·1	56·9	57·4	56·1	53·8	55·1	56·2	55·2	54·8	49·6	50·3	52·9	54·1
28 d	53·1	53·5	52·7	53·0	53·3	53·2	52·7	51·8	51·6	52·8	55·8	60·1	64·5	68·7	71·0	65·8	49·6	59·0	97·1	49·4	43·4	18·9	26·1	16·5	53·1
29 d	29·8	49·6	50·7	51·3	55·5	57·8	56·3	75·7	69·2	56·2	54·3	51·2	60·6	60·1	59·3	54·9	52·4	43·2	40·2	27·4	29·0	42·7	42·4	46·9	*50·7*
30	40·4	52·4	60·8	57·5	54·3	55·6	55·6	55·4	54·6	51·7	54·5	57·4	59·2	52·1	56·4	52·3	46·3	40·0	41·7	45·7	47·0	54·6	54·8	49·7	52·1
31	44·3	51·2	54·2	54·0	51·7	53·2	50·9	50·6	50·4	51·5	55·6	53·9	55·7	60·1	45·1	51·6	51·8	46·4	35·9	49·3	47·5	53·6	53·9	52·2	51·0
Mean	51·5	53·6	53·5	52·2	53·0	53·6	54·0	54·2	53·6	53·5	55·4	57·7	*59·7*	59·7	58·8	56·0	54·6	51·2	51·7	50·9	49·8	*48·8*	50·6	50·5	53·7

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

42 LERWICK (V) — 46,000γ (0·46 C.G.S. unit) + — OCTOBER 1942

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1 q	906	907	909	909	910	910	913	916	917	915	912	909	907	906	906	909	912	913	913	914	915	911	911	887	910
2 d	880	886	895	893	896	894	895	896	900	910	898	899	911	957	998	1025	1051	1040	1047	980	782	847	869	852	921
3 d	788	728	720	724	656	799	850	870	872	893	912	931	942	954	962	1010	1024	989	932	901	910	878	825	800	*870*
4	805	823	846	878	886	870	868	886	895	903	911	917	938	966	965	995	1026	966	961	962	944	909	826	795	906
5	835	838	855	827	868	883	899	902	909	922	934	940	940	949	986	969	951	940	923	918	926	921	904	888	909
6	861	883	902	908	911	910	911	916	919	922	923	923	920	919	919	919	917	914	914	917	928	892	890	895	910
7	871	813	795	851	878	885	901	896	897	903	908	914	918	934	949	973	950	940	945	946	944	928	894	877	905
8	895	904	908	904	901	905	907	909	912	922	925	925	922	922	925	925	926	933	961	966	939	926	916	906	920
9 q	899	869	876	899	908	912	903	901	901	903	905	908	908	910	915	918	920	918	918	917	913	911	911	911	906
10	910	913	915	913	911	909	908	905	905	906	908	906	904	904	908	909	911	910	911	911	911	925	918	914	910
11	912	915	915	915	915	915	914	915	914	909	903	901	901	902	911	918	924	919	916	911	983	954	931	923	918
12 d	905	872	834	821	861	894	909	915	914	911	927	931	965	940	929	946	958	953	927	927	921	925	877	822	908
13	845	830	803	848	890	911	920	922	917	918	916	913	914	926	939	959	973	994	958	934	920	861	818	828	902
14	860	880	889	887	904	909	912	913	920	920	920	925	944	947	958	1000	946	928	946	909	854	805	860	867	908
15	883	884	901	893	876	844	868	891	908	918	917	914	917	923	935	948	954	956	947	928	925	883	788	826	901
16	863	810	834	885	906	909	916	915	918	921	922	923	933	951	933	941	957	948	928	931	884	903	912	895	910
17	880	882	893	902	895	882	901	904	912	917	917	915	913	917	922	927	933	927	922	924	928	899	899	909	909
18	908	910	888	890	896	902	911	914	920	922	920	926	931	933	935	954	975	976	985	966	912	892	907	883	923
19	776	757	799	855	872	884	901	912	919	920	923	928	953	981	985	1030	998	965	936	936	931	933	923	916	914
20	913	881	903	906	893	901	909	913	917	922	923	928	941	947	984	994	1020	973	931	917	916	916	918	919	*929*
21	918	919	920	920	918	915	913	914	919	918	919	921	924	934	936	943	970	949	932	926	922	927	923	920	926
22 q	918	911	916	918	917	917	918	920	923	923	921	923	928	928	928	927	923	920	920	923	925	924	920	920	921
23 q	915	918	923	922	920	916	917	917	919	919	912	916	917	918	920	925	926	927	927	923	921	919	918	912	919
24 q	916	917	917	916	917	916	916	916	914	914	912	911	911	913	917	917	916	913	913	912	915	915	919	916	915
25	914	916	910	895	876	872	870	877	869	879	891	897	904	910	915	921	919	919	924	925	920	918	918	913	903
26	910	911	890	890	897	893	897	905	908	912	911	910	912	913	918	918	918	917	917	916	907	883	902	896	906
27	858	840	861	887	899	908	911	911	912	912	912	912	908	910	915	923	928	923	918	917	919	911	908	908	905
28 d	910	909	910	912	912	912	911	911	910	911	912	905	909	931	993	1052	1120	925	880	1003	933	760	704	769	913
29 d	698	821	852	822	864	867	904	924	867	907	965	1041	1019	973	967	961	1033	1084	984	882	827	751	739	749	896
30	763	820	815	808	858	867	891	906	924	950	959	949	971	989	1008	1066	1028	1011	950	927	907	812	802	835	909
31	843	819	848	855	892	901	902	923	934	940	944	976	981	986	1000	975	981	976	937	928	926	898	867	906	922
Mean	870	*867*	872	879	887	894	902	908	909	915	919	924	929	935	945	958	*964*	951	936	929	913	892	878	876	910

Corrections to be applied to all values: H, -6γ; D, $-4\cdot2'$; V, -3γ.

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

43 LERWICK — OCTOBER 1942

	TERRESTRIAL MAGNETIC ELEMENTS												3-hr. range indices *K*	Sum of *K* indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination			Vertical force							
	Maximum 14,000γ +		Minimum 14,000γ +		Range	Maximum 11° +		Minimum 11° +		Range	Maximum 46,000γ +		Minimum 46,000γ +		Range				
	h. m.	γ	γ	h. m.	γ	h. m.	′	′	h. m.	′	h. m.	γ	γ	h. m.	γ					°A.
1 q	21 24	409	364	10 36	45	14 35	59·3	46·7	24 0	12·6	8 30	917	882	23 47	35	0,0,1,1,1,1,1,2	7	0	83·0
2 d	15 30	*1117*	210	20 49	907	20 47	121·2	14·6	19 49	106·6	15 25	1118	625	20 43	493	3,2,2,4,5,8,7,4	35	2	83·0
3 d	15 34	502	2	4 11	500	0 55	85·4	29·8	18 29	55·6	15 29	1073	*579*	4 15	494	6,6,3,3,4,5,4,4	35	2	82·5
4	16 32	650	301	22 33	349	6 6	63·6	29·3	16 38	34·3	16 30	1099	765	23 0	334	3,3,3,3,3,6,3,5	29	1	82·3
5	14 50	416	301	3 13	115	3 16	66·1	38·4	20 33	27·7	14 19	1001	802	3 29	199	3,4,3,2,3,3,3,3	24	1	82·5
6	19 4	396	358	21 58	38	12 40	58·0	48·6	22 11	9·4	20 37	933	857	0 37	76	3,2,1,2,1,0,2,3	14	0	82·0
7	15 33	401	255	2 6	146	13 32	64·6	36·6	1 44	28·0	15 27	980	775	2 33	205	5,3,2,2,2,3,2,3	22	1	82·0
8	16 53	398	354	11 38	44	13 2	62·3	36·9	18 55	25·4	18 48	981	887	0 0	94	2,2,0,1,2,1,4,2	14	1	82·0
9 q	17 46	405	344	1 13	61	13 38	63·6	50·0	0 11	13·6	18 35	922	853	0 53	69	3,2,2,1,2,2,1,0	13	0	82·0
10	15 37	413	369	10 13	44·	14 15	62·2	44·8	22 55	17·4	21 58	932	900	8 4	32	0,1,2,2,2,2,1,3	13	1	81·5
11	20 25	476	360	11 8	116	15 37	64·2	40·1	20 58	24·1	20 44	1022	899	11 4	123	1,1,1,1,2,2,4,3	15	1	81·0
12 d	17 54	451	278	2 50	173	12 28	67·8	34·0	17 35	33·8	12 24	1008	787	2 50	221	4,4,3,4,4,4,3,4	30	1	80·5
13	17 38	442	266	1 39	176	12 49	67·1	9·8	17 30	57·3	17 10	1039	788	2 50	251	5,4,2,3,3,5,4,4	30	1	80·5
14	14 57	448	279	21 35	169	14 41	68·5	26·7	19 18	41·8	15 12	1024	778	21 26	246	4,2,2,2,4,5,5,4	28	1	80·5
15	22 4	433	277	4 54	156	22 30	69·2	20·3	18 51	48·9	15 58	965	767	22 51	198	2,4,3,3,3,3,4,5	27	1	81·0
16	18 20	460	201	1 42	259	12 8	62·8	21·4	18 15	41·4	18 10	966	763	1 41	203	5,3,2,2,3,3,5,2	25	1	81·0
17	21 0	414	343	0 15	71	0 26	62·5	36·6	20 53	25·9	20 27	936	861	0 54	75	3,3,2,2,1,3,4,3	21	1	80·8
18	19 58	425	333	21 3	92	15 4	64·5	27·9	17 4	36·6	17 0	996	839	24 0	157	2,2,3,2,2,5,4,4	24	1	79·8
19	15 10	578	151	1 19	427	1 37	71·2	16·9	17 10	54·3	15 10	1074	730	0 44	344	6,3,3,4,4,5,4,2	31	1	80·5
20	16 30	413	341	1 8	72	11 58	62·3	32·8	15 14	29·5	16 39	1035	875	1 42	160	3,2,2,3,4,4,3,0	21	1	79·8
21	15 30	402	351	13 54	51	15 51	61·2	43·2	16 30	18·0	16 13	982	912	6 0	70	0,1,1,1,2,3,1,2	11	0	80·0
22 q	18 44	395	360	12 47	*35*	12 37	60·3	49·5	21 49	10·8	12 50	931	907	1 24	24	2,1,1,1,1,1,1,2	10	0	80·1
23 q	23 25	401	357	9 22	44	12 57	64·4	50·7	23 17	13·7	18 2	932	909	23 43	23	1,0,1,2,2,2,1,1	10	0	80·6
24 q	21 30	408	368	9 57	40	12 24	58·9	50·5	8 54	*8·4*	22 28	921	907	21 34	*14*	1,1,0,1,1,1,2,2	9	0	80·4
25	13 1	413	358	12 50	55	13 2	64·8	47·1	23 16	17·7	18 50	928	866	8 25	62	2,3,3,2,3,1,1,2	17	1	80·0
26	21 11	454	364	12 9	90	11 53	58·6	37·9	21 4	20·7	14 48	919	871	21 14	48	2,2,2,1,1,1,3,3	15	1	79·5
27	21 18	418	366	0 50	52	0 54	62·0	47·7	21 10	14·3	16 8	932	835	1 24	97	3,2,1,1,1,2,1,2	13	0	79·2
28 d	15 53	1098	*-547*	23 37	*1645*	18 17	*141·5*	*-42·9*	23 58	*184·4*	16 20	*1156*	641	21 4	*515*	0,0,1,2,5,8,9,8	33	2	79·1
29 d	17 0	557	−48	21 31	605	21 29	92·3	−28·1	0 0	120·4	17 31	1124	620	21 27	504	6,4,5,5,5,5,6,6	37	2	79·0
30	15 45	596	217	2 11	379	2 51	66·4	2·3	18 1	64·1	15 45	1155	730	0 32	425	4,4,4,3,4,6,5,3	33	2	79·0
31	18 21	439	302	0 42	137	13 39	65·6	20·3	18 15	45·3	14 15	1013	811	1 12	202	3,3,3,3,4,3,4,4	27	1	78·4
Mean	— —	491	262	— —	229	— —	69·8	29·7	— —	40·1	— —	1000	807	— —	193	2·7	21·7	0·90	80·8

q denotes an international quiet day and d an international disturbed day.

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

44 LERWICK (H) — 14,000γ (0·14 C.G.S. unit) + — NOVEMBER 1942

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	365	374	376	382	377	387	383	375	359	368	364	359	373	371	371	385	374	384	381	384	383	383	385	386	376
2	380	386	363	374	375	391	389	386	381	361	349	350	353	365	374	387	384	384	385	380	379	378	378	376	375
3	374	367	371	379	391	390	383	381	380	371	366	364	367	369	376	380	381	376	372	373	389	377	380	375	376
4	379	379	380	382	383	393	398	367	364	366	365	343	353	361	370	380	387	388	389	388	391	385	379	394	378
5	383	384	384	388	394	394	394	392	385	375	369	370	371	372	374	380	387	391	403	402	402	395	388	365	385
6	367	365	371	383	387	391	391	389	384	373	372	374	377	380	385	387	383	388	392	394	393	387	386	388	383
7	389	377	380	390	394	388	399	402	395	379	375	376	373	376	386	388	391	395	396	396	389	390	393	391	388
8	390	393	390	391	396	396	395	396	387	365	373	376	381	373	394	399	397	396	394	396	402	379	385	383	389
9 q	379	372	377	380	382	385	383	382	377	374	373	374	378	387	389	389	385	391	390	388	392	388	391	385	383
10	391	391	387	387	387	390	393	395	393	394	394	393	395	397	370	391	390	388	391	391	388	399	382	388	390
11	374	379	389	383	391	389	388	388	387	387	384	387	376	392	391	394	391	394	386	395	383	386	383	368	386
12	383	389	380	365	385	393	385	388	388	382	372	372	375	382	380	391	390	393	390	393	387	382	391	388	384
13	385	376	375	384	391	397	399	399	392	388	381	377	387	394	383	377	383	388	382	385	374	384	388	375	385
14	381	378	372	374	382	384	388	394	378	378	371	374	375	385	387	388	396	394	395	387	388	365	381	380	382
15	352	369	370	380	391	393	392	393	390	383	378	378	382	388	385	379	383	386	393	404	385	387	391	395	384
16 q	383	380	382	386	390	390	393	393	388	380	376	378	381	386	390	392	394	396	393	387	388	390	392	393	388
17 q	391	388	388	390	394	395	393	392	388	384	381	380	371	379	378	379	378	380	381	378	378	384	374	363	383
18	372	360	378	386	390	392	393	389	368	369	383	385	386	391	393	384	395	395	395	382	375	386	386	388	384
19 q	389	387	388	391	395	394	394	397	396	393	386	379	389	393	395	397	396	394	396	393	394	394	396	393	*392*
20	392	388	388	397	389	405	411	410	406	407	395	381	387	388	384	388	389	394	387	372	378	382	377	372	390
21	375	380	379	382	385	379	371	386	388	384	382	372	382	385	388	385	392	388	388	384	383	384	385	384	383
22 q	383	383	382	384	386	386	385	387	381	378	382	381	382	382	384	388	393	392	392	386	393	398	388	391	386
23 d	392	391	393	399	401	401	402	400	401	395	390	388	375	375	379	378	371	379	385	385	382	357	195	234	373
24 d	−5	88	335	226	337	338	330	288	282	327	388	385	389	385	379	374	380	365	354	357	292	376	376	363	*321*
25 d	377	338	355	353	351	374	380	374	359	356	344	357	364	358	378	375	387	380	380	391	380	328	368	379	366
26 d	368	363	325	287	368	380	379	378	366	352	356	360	378	379	375	385	395	397	376	393	397	364	384	377	370
27	368	370	367	374	382	380	382	380	368	343	358	360	367	377	374	380	382	383	386	371	364	385	376	386	373
28 d	368	368	366	373	376	391	399	381	376	371	357	351	370	391	402	399	402	382	385	377	368	366	384	341	377
29	302	331	357	366	378	380	381	378	379	365	359	375	365	369	372	371	378	369	371	373	380	376	369	389	368
30	374	374	378	381	384	395	391	385	374	373	373	373	377	374	371	381	378	377	373	365	370	377	381	377	377
Mean	*363*	366	374	373	384	388	*388*	385	379	374	373	372	376	380	382	385	387	387	386	385	382	380	377	376	379

Corrections to be applied to all values: H, −6γ; D, −4·2′; V, −4γ.

MAGNETIC DECLINATION (WEST)

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

45 LERWICK (D) — 11° — NOVEMBER 1942

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	56·8	53·8	55·8	54·1	53·3	54·8	55·9	55·7	55·1	56·4	56·5	54·6	56·4	57·6	55·8	55·7	50·5	51·7	52·6	53·3	52·3	47·0	49·9	50·3	54·0
2	54·8	49·7	54·6	52·5	51·5	54·0	52·8	52·4	52·7	54·2	56·2	59·5	61·5	63·4	64·4	49·4	51·3	58·6	48·6	53·8	52·8	49·8	51·3	50·9	54·2
3	51·5	50·9	52·4	52·8	52·2	52·3	52·8	53·8	53·8	55·1	56·5	57·9	58·7	59·8	56·8	57·8	55·7	51·9	52·7	51·1	44·5	46·8	47·6	48·0	53·1
4	51·8	54·4	53·3	52·7	53·8	52·9	54·4	54·3	57·2	56·8	57·6	59·7	61·2	59·1	57·4	55·7	54·0	54·9	54·6	51·8	48·8	52·5	49·3	49·8	54·5
5	51·8	51·7	51·3	49·7	50·5	51·5	51·7	51·6	51·6	52·8	54·4	57·2	58·0	57·8	56·9	55·3	54·7	54·5	55·6	55·4	54·4	52·7	48·4	45·2	53·1
6	48·4	51·3	53·2	50·6	51·7	51·6	51·6	51·6	52·1	53·7	54·9	57·3	58·5	57·7	57·3	56·7	55·8	55·3	54·3	54·3	53·8	51·1	46·8	52·7	53·4
7	53·3	56·7	56·3	52·9	51·3	52·9	55·7	53·8	53·4	54·2	55·0	58·2	59·0	58·9	62·9	58·4	57·6	55·7	55·4	55·9	52·9	51·8	51·9	50·3	*55·2*
8	50·8	50·1	50·3	52·1	50·5	51·1	52·3	52·2	52·7	53·4	57·2	58·1	61·3	59·9	56·9	58·5	58·3	58·0	56·4	55·6	38·8	47·6	52·9	51·5	53·6
9 q	52·7	50·0	51·3	52·0	52·3	51·9	52·1	52·2	52·3	52·7	54·6	55·6	55·8	55·8	56·4	56·1	55·5	53·2	56·5	54·6	53·0	50·8	51·1	52·6	53·4
10	52·6	52·2	51·5	52·2	52·6	53·2	53·2	52·5	51·8	52·0	53·6	55·9	57·4	58·6	60·4	58·2	60·5	58·8	55·6	55·0	52·9	53·8	50·2	49·3	54·3
11	42·7	48·6	50·5	48·3	49·9	52·5	51·7	51·8	51·0	52·3	52·7	55·6	58·3	53·4	55·7	56·3	55·8	56·2	53·9	37·7	49·1	49·8	49·3	50·8	51·4
12	51·3	50·4	51·4	53·8	54·5	54·6	54·1	54·2	53·2	52·9	53·6	54·6	56·0	56·0	52·2	52·5	55·2	54·6	49·3	48·7	49·8	49·5	50·7	53·9	52·8
13	49·7	47·5	48·8	51·3	52·0	52·1	52·2	52·8	51·2	53·1	53·8	55·2	56·3	60·5	63·4	58·6	57·4	57·2	53·8	51·6	47·8	48·5	50·8	50·4	53·2
14	52·0	51·6	51·2	51·2	51·9	51·7	53·8	54·2	51·5	51·6	56·2	55·2	55·4	56·7	56·7	56·3	55·7	54·2	40·5	53·1	53·3	51·4	47·1	52·6	52·7
15	57·0	54·9	51·8	54·7	53·0	52·7	52·1	52·2	52·6	53·1	54·7	56·0	56·3	56·7	56·1	54·3	53·9	54·5	51·7	49·9	47·8	49·4	48·7	50·4	53·1
16 q	52·8	52·1	51·9	52·2	51·8	52·4	52·3	52·4	52·5	52·8	54·0	55·2	55·9	55·9	54·8	54·0	53·8	53·8	53·6	51·6	49·5	50·4	52·3	54·0	53·0
17 q	53·2	53·7	53·8	52·9	53·7	52·3	52·5	54·3	54·9	56·7	57·2	57·7	58·0	58·0	58·7	58·5	58·8	55·7	54·1	52·9	50·4	51·5	51·3	47·7	54·5
18	43·5	47·0	49·5	49·9	50·5	51·1	52·3	54·4	56·3	57·1	56·6	57·2	56·3	56·3	56·4	55·0	55·1	54·9	54·8	51·6	44·6	52·4	51·8	52·1	52·8
19 q	53·0	53·4	53·3	53·5	53·2	53·0	53·4	54·3	53·9	53·5	55·5	56·8	56·5	56·3	56·3	55·8	56·1	52·7	55·1	52·2	49·5	53·0	52·8	52·1	54·0
20	52·8	51·2	54·7	54·5	55·3	55·1	52·8	52·9	53·8	54·7	55·7	56·3	60·8	60·7	61·0	60·8	59·3	59·6	40·5	49·0	51·6	51·0	46·7	42·5	53·9
21	48·0	51·8	52·7	52·6	51·0	51·8	55·2	54·1	54·1	53·7	55·8	55·9	55·0	56·7	56·5	55·2	55·0	55·7	54·5	53·6	45·1	44·5	49·5	50·1	52·8
22 q	53·0	53·8	53·3	53·3	52·7	52·7	52·4	52·6	52·8	53·1	53·6	54·6	55·1	56·0	54·8	53·6	54·1	52·1	49·8	52·7	51·8	51·6	52·1	52·4	53·1
23 d	53·1	53·8	53·4	53·4	53·1	54·2	54·9	54·8	55·6	55·3	55·8	56·8	57·8	61·6	60·9	54·6	54·8	53·8	52·7	52·6	47·0	43·3	29·0	32·8	52·3
24 d	20·3	47·7	33·4	45·2	73·2	65·8	57·9	63·6	58·4	53·4	56·2	56·1	56·6	51·5	55·1	51·9	52·9	46·9	36·7	37·5	44·7	49·2	51·1	49·3	50·6
25 d	49·4	50·1	47·2	49·1	58·7	56·5	54·8	52·2	54·5	52·6	53·6	53·7	57·7	56·0	53·7	45·4	50·2	54·1	50·1	39·7	47·2	52·3	45·6	49·4	51·4
26 d	49·6	55·8	61·1	64·4	49·9	49·6	50·2	52·8	54·0	53·9	51·5	54·2	58·2	45·7	49·8	53·5	48·1	38·9	53·4	46·4	41·8	48·5	45·8	46·9	51·0
27	49·0	51·6	54·5	56·7	55·5	55·5	54·2	58·0	57·6	55·9	59·4	58·3	56·9	56·1	52·1	51·9	53·4	52·0	52·0	46·5	38·2	43·1	44·7	44·1	52·4
28 d	46·7	48·8	48·2	49·4	46·7	49·2	53·5	53·5	54·8	54·0	54·9	55·4	54·9	54·8	52·6	55·8	43·1	37·3	38·4	43·8	50·1	50·7	33·0	31·7	*48·4*
29	43·7	42·3	50·7	53·9	53·3	53·2	52·6	54·0	54·6	53·6	53·1	56·9	59·1	56·1	57·6	49·5	44·9	45·7	47·1	52·6	51·5	50·3	48·8	44·2	51·2
30	49·6	52·3	53·0	53·7	54·3	53·0	53·4	53·8	53·6	53·8	54·1	55·4	57·4	57·7	56·6	55·2	53·6	52·2	49·9	49·3	49·3	51·4	50·1	52·0	53·1
Mean	49·8	51·3	51·8	52·5	53·1	53·2	53·3	53·8	53·8	53·9	55·1	56·4	*57·5*	57·0	56·9	55·0	54·2	53·2	51·1	50·5	48·8	49·9	*48·4*	48·7	52·9

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

46 LERWICK (V) — 46,000γ (0·46 C.G.S. unit) + — NOVEMBER 1942

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	897	896	902	908	913	909	911	915	929	925	931	938	939	947	943	945	944	937	932	930	932	934	927	918	925
2	903	881	896	895	897	901	909	915	919	928	938	938	937	946	961	1004	980	981	1001	942	895	914	913	883	928
3	890	907	913	916	914	915	919	921	924	928	929	935	943	954	968	966	967	982	966	959	926	922	916	911	933
4	916	920	921	921	920	918	913	924	922	923	926	937	928	929	928	927	928	926	927	929	927	926	928	903	924
5	900	895	906	914	914	915	915	917	920	922	924	923	924	927	929	925	919	919	916	918	919	925	941	913	918
6	923	922	896	892	913	917	918	918	918	922	921	920	922	926	928	931	934	926	923	921	920	926	928	921	920
7	918	915	903	910	912	912	902	901	907	914	917	919	929	940	943	949	938	931	928	931	942	941	936	934	924
8	929	918	917	918	913	910	910	908	908	918	918	919	924	940	939	930	928	924	925	926	975	940	926	922	924
9 q	884	895	910	919	922	921	920	919	919	920	920	919	921	924	927	927	930	929	924	925	924	928	924	922	920
10	912	916	922	922	922	920	916	912	911	910	909	910	913	925	953	943	934	945	944	934	934	889	888	895	920
11	895	880	887	898	904	912	913	914	915	915	915	914	925	926	924	928	926	924	938	939	926	922	912	878	914
12	884	889	900	907	906	912	918	922	921	921	920	919	918	916	927	928	925	924	932	925	924	921	906	865	914
13	864	878	897	907	911	912	912	913	916	914	913	911	910	914	941	966	950	949	964	953	944	923	921	894	920
14	880	891	902	912	917	923	912	916	921	930	928	925	926	926	926	929	928	939	950	941	915	891	908	879	917
15	855	836	874	890	903	914	918	919	920	921	921	919	918	918	923	929	934	934	930	908	910	915	908	894	909
16 q	849	879	901	907	910	911	911	912	915	917	917	914	913	915	916	916	916	916	918	920	921	915	910	908	909
17 q	904	910	911	912	908	911	912	910	911	911	912	914	923	921	928	938	945	945	944	949	946	935	922	898	922
18	878	885	892	905	911	912	911	912	917	916	913	917	920	922	928	934	923	920	918	931	949	927	925	923	916
19 q	922	921	917	914	912	911	910	907	907	908	912	918	918	919	919	919	919	922	917	918	920	916	918	921	916
20	918	918	915	901	906	896	896	897	898	897	903	910	913	921	928	929	938	969	1017	980	945	935	942	930	925
21	923	920	922	922	916	912	910	902	904	907	910	916	915	919	920	923	921	922	921	925	929	923	918	914	917
22 q	916	919	920	919	918	916	914	912	912	911	911	914	917	919	919	922	919	921	921	920	916	905	913	914	916
23 d	916	918	916	914	913	912	910	907	905	907	908	912	921	932	945	997	1006	976	945	940	936	857	667	637	904
24 d	648	651	764	692	659	747	845	895	922	963	994	949	966	991	951	944	941	950	967	931	820	899	915	908	*871*
25 d	879	873	820	852	850	869	895	912	921	924	937	956	951	957	964	1003	972	955	961	941	942	867	835	898	914
26 d	903	888	852	759	820	877	900	907	918	925	938	935	945	977	978	966	976	957	944	939	902	913	873	856	910
27	877	894	903	900	903	909	913	912	916	934	931	931	928	933	940	937	930	930	931	946	951	932	913	899	921
28 d	906	913	916	919	919	910	912	911	922	924	932	942	959	965	997	978	1014	999	975	985	955	933	900	881	*940*
29	830	840	859	887	907	920	921	922	921	926	936	937	942	945	941	953	960	965	967	941	930	928	928	915	922
30	911	912	915	915	911	903	906	911	919	921	919	916	921	930	936	935	940	946	952	954	941	928	919	909	924
Mean	*888*	889	896	895	898	904	909	912	916	920	923	924	928	934	939	*947*	943	942	943	937	927	918	906	895	918

Corrections to be applied to all values: H, -6γ; D, $-4{\cdot}2'$; V, -4γ.

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

47 LERWICK — NOVEMBER 1942

	TERRESTRIAL MAGNETIC ELEMENTS															3-hr. range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination				Vertical force									
	Maximum 14,000γ +		Minimum 14,000γ +		Range	Maximum 11° +		Minimum 11° +		Range	Maximum 46,000γ +		Minimum 46,000γ +		Range				
	h. m.	γ	γ	h. m.	γ	h. m.	′	′	h. m.	′	h. m.	γ	γ	h. m.	γ					°A.
1	17 20	398	341	11 11	57	13 31	59·6	43·2	21 26	16·4	13 43	952	891	1 19	61	2,2,3,2,2,3,1,3	18	1	78·1
2	19 43	421	337	11 10	84	14 36	65·6	35·1	15 52	30·5	15 31	1035	873	1 33	162	3,2,2,2,2,4,4,2	21	1	78·1
3	20 19	412	358	13 2	54	13 27	62·8	38·1	20 19	24·7	17 24	1001	885	1 20	116	2,1,0,1,2,3,3,2	14	1	78·3
4	23 13	416	328	11 39	88	12 5	62·5	42·1	20 30	20·4	11 40	944	898	23 46	46	1,2,3,3,2,1,3,3	18	1	78·7
5	18 11	413	339	23 22	74	13 39	58·6	42·8	23 47	15·8	22 28	949	890	1 13	59	2,1,2,1,1,1,2,3	13	0	79·0
6	19 35	396	360	14 4	36	12 17	58·7	43·8	22 25	14·9	16 24	937	879	3 13	58	3,2,1,1,1,1,0,3	12	0	79·0
7	7 8	407	360	13 3	47	14 45	65·6	49·4	23 21	16·2	15 23	955	895	7 7	60	2,1,2,2,2,2,2,1	14	0	79·2
8	20 26	428	358	13 26	70	12 23	63·9	25·8	20 46	38·1	20 38	1014	906	7 18	108	2,2,2,2,3,2,4,4	21	1	79·2
9 q	22 5	400	357	1 12	43	0 20	58·2	46·8	22 0	11·4	17 10	932	868	0 47	64	3,1,0,1,1,2,2,2	12	0	79·2
10	21 29	419	360	14 22	59	14 19	65·1	44·5	24 0	20·6	14 48	965	865	21 50	100	1,1,2,1,3,2,3,3	16	1	80·0
11	19 20	414	354	23 14	60	12 1	61·7	24·0	19 15	37·7	19 5	961	865	23 39	96	3,2,2,2,3,1,5,3	21	1	80·0
12	22 54	408	359	3 36	49	23 9	59·6	41·6	18 47	18·0	18 39	937	860	23 27	77	2,2,2,1,2,2,3,3	17	1	79·2
13	13 16	410	354	20 56	56	14 26	65·8	42·0	20 33	23·8	15 30	970	861	0 40	109	2,2,1,2,3,3,3,3	19	1	79·1
14	18 25	421	351	21 18	70	20 35	62·1	27·2	18 22	34·9	18 9	970	861	23 41	109	2,2,2,3,2,3,5,3	22	1	79·2
15	19 10	423	326	0 40	97	0 44	66·3	44·8	19 9	21·5	16 19	938	812	1 5	126	4,2,0,0,1,1,3,3	14	1	80·0
16 q	20 30	406	367	0 55	39	0 50	56·8	45·8	20 28	11·0	20 4	929	842	0 32	87	3,1,1,0,0,0,2,2	9	0	80·0
17 q	4 32	404	349	23 5	55	13 55	59·7	42·1	24 0	17·6	19 48	953	879	24 0	74	1,2,1,1,1,1,2,3	12	0	79·0
18	14 34	404	351	1 48	53	9 13	58·3	37·9	20 19	20·4	20 10	958	870	0 19	88	3,1,2,2,2,2,3,2	17	1	78·6
19 q	15 12	403	374	11 30	*29*	11 58	58·0	44·5	19 58	13·5	17 29	927	903	8 26	*24*	0,1,1,1,1,2,3,1	10	0	79·0
20	18 4	418	355	23 40	63	15 15	63·2	28·3	18 34	34·9	18 27	1040	891	5 38	149	2,2,1,3,2,2,4,3	19	1	80·4
21	20 12	397	363	6 24	34	14 55	58·1	40·6	21 27	17·5	19 56	934	901	7 18	33	2,1,2,2,1,1,3,3	15	0	78·1
22 q	21 0	412	376	9 39	36	13 11	56·7	46·3	17 55	*10·4*	18 4	926	898	21 24	28	1,0,1,1,1,2,2,2	10	0	76·9
23 d	8 9	405	12	22 44	393	16 31	64·2	*-2·9*	22 53	67·1	15 56	1035	*522*	23 11	*513*	0,1,0,1,2,4,3,6	17	1	76·8
24 d	9 50	443	*-252*	1 0	*695*	4 22	*83·7*	3·0	0 45	*80·7*	10 17	1040	554	0 42	486	7,6,4,5,3,3,6,3	37	2	77·2
25 d	19 18	414	168	21 54	246	21 49	81·5	27·6	19 11	53·9	15 47	1035	763	21 49	272	4,4,3,3,3,4,4,6	31	1	78·2
26 d	19 56	482	226	3 11	256	3 15	75·9	15·5	19 55	60·4	16 42	1025	743	3 25	282	4,5,2,3,4,4,5,3	30	1	78·8
27	21 30	409	323	9 31	86	10 5	62·1	29·0	20 27	33·1	21 7	960	859	0 0	101	3,1,2,3,2,1,4,3	19	1	79·1
28 d	16 14	*485*	265	24 0	220	15 45	61·8	10·4	17 49	51·4	16 21	*1109*	869	23 17	240	3,2,2,2,4,5,4,5	27	1	78·7
29	23 16	405	254	0 5	151	12 23	60·6	31·0	0 55	29·6	18 10	979	808	0 40	171	4,3,2,2,2,4,3,3	23	1	77·8
30	5 27	399	354	14 11	45	14 5	59·5	45·0	20 11	14·5	18 55	959	900	5 23	59	2,1,2,1,2,2,2,2	14	0	76·2
Mean	- -	416	304	- -	111	- -	63·2	34·5	- -	28·7	- -	976	844	- -	132	2·3	18·1	0·70	78·7

q denotes an international quiet day and d an international disturbed day.

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

48 LERWICK (H) — 14,000γ (0·14 C.G.S. unit) + — DECEMBER 1942

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	379	383	383	385	387	388	391	389	383	377	375	376	378	379	383	388	393	393	388	377	380	389	405	373	384
2	394	374	380	383	386	386	385	385	386	383	380	377	378	384	388	389	392	392	391	392	391	391	390	385	386
3	387	381	381	383	386	388	390	389	387	384	381	380	380	386	391	392	395	384	387	389	390	391	406	385	387
4	377	381	385	387	386	389	382	391	392	389	383	381	386	386	373	373	388	394	393	392	390	388	389	390	386
5	381	382	382	381	384	387	387	386	386	383	382	381	384	388	392	390	387	395	392	392	389	390	389	389	387
6	388	388	389	392	393	394	393	391	388	383	380	379	382	387	388	395	397	395	392	382	379	381	393	394	388
7	388	389	391	394	397	401	399	397	396	390	380	385	382	374	379	380	369	374	379	378	372	346	358	360	382
8	374	375	381	386	390	392	398	397	382	380	378	378	383	383	395	385	393	407	397	444	416	348	367	372	388
9 d	380	379	364	366	383	390	396	393	392	383	384	384	395	396	372	383	406	450	452	590	443	396	207	88	382
10 d	302	363	356	354	347	381	388	379	363	368	372	376	373	374	386	389	384	384	383	380	393	390	378	379	373
11	376	380	380	373	370	394	392	386	385	366	367	371	372	359	380	392	390	389	388	386	387	385	389	409	382
12	385	364	377	380	386	391	394	391	374	369	364	366	363	368	383	384	396	392	392	388	385	381	374	384	380
13	372	384	380	380	383	384	387	386	385	381	377	382	380	384	386	386	380	385	389	384	383	382	386	387	383
14	386	381	379	380	386	391	397	400	396	383	375	378	380	380	385	388	387	385	377	380	383	382	380	379	384
15	377	383	380	381	387	391	394	392	390	382	381	383	385	390	397	398	399	395	393	395	396	391	386	393	389
16	385	379	380	383	386	388	390	393	393	386	383	381	387	389	395	395	384	388	383	383	386	389	391	384	387
17 q	384	383	385	386	388	390	397	395	393	395	395	389	387	389	392	395	390	386	388	386	385	385	387	386	389
18 q	385	384	384	387	390	392	392	394	394	389	386	388	389	392	396	395	396	396	397	392	393	392	391	389	391
19 q	389	389	389	392	392	399	399	395	396	395	392	389	389	393	397	399	399	400	398	397	396	394	395	390	*394*
20	395	388	386	401	400	404	403	401	397	390	386	387	389	394	395	396	396	390	385	387	394	393	391	415	*394*
21 d	378	388	380	386	395	400	398	403	395	377	343	371	355	356	377	386	355	367	368	376	383	388	393	375	379
22	368	344	352	368	364	386	388	382	376	377	373	360	379	387	388	386	390	389	386	378	383	387	387	385	378
23 d	384	385	380	380	380	395	395	368	355	349	328	349	392	378	401	409	369	410	377	375	366	375	369	369	377
24	367	366	369	371	372	378	379	374	371	357	380	372	368	376	354	366	371	376	381	375	385	395	393	366	373
25	369	362	344	370	383	383	384	386	378	363	365	365	374	370	371	372	367	366	371	380	376	380	371	364	*371*
26 d	355	352	377	371	380	400	409	388	380	373	373	369	364	370	369	373	379	383	375	373	376	368	333	375	374
27	379	380	382	381	387	386	396	392	386	381	376	377	379	382	374	382	386	388	389	385	384	384	382	380	383
28	380	380	382	377	391	395	390	388	385	381	385	383	380	376	380	384	386	386	384	385	384	385	386	387	384
29	385	386	384	386	388	390	392	392	389	385	387	383	381	376	383	387	382	380	386	386	385	380	380	385	385
30 q	383	383	384	386	387	387	388	388	386	383	380	378	382	386	386	387	389	390	391	389	386	380	382	383	385
31 q	385	393	384	384	388	392	393	394	392	385	380	376	382	388	391	393	392	392	392	393	394	394	392	390	389
Mean	378	378	378	381	385	391	393	390	386	380	376	377	380	381	385	388	387	390	389	*393*	388	384	378	*374*	384

391 at 0-1h. January 1, 1943.

Corrections to be applied to all values: H, −6γ; D, −4·2′; V, −5γ.

MAGNETIC DECLINATION (WEST)

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

49 LERWICK (D) — 11° + — DECEMBER 1942

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	53·8	52·4	52·1	53·0	53·8	53·2	52·8	52·6	52·3	52·7	53·8	55·4	55·5	56·4	56·8	54·8	55·4	55·1	55·7	43·2	52·7	51·3	46·2	48·0	52·9
2	47·8	51·1	51·3	49·9	51·1	51·8	52·0	52·1	52·4	52·5	53·4	54·6	54·9	55·4	54·5	54·0	54·0	53·8	53·1	52·7	52·4	52·0	51·9	51·0	52·5
3	45·8	49·0	51·2	51·7	51·8	52·0	52·1	51·9	52·1	52·0	53·4	55·3	55·5	55·4	55·0	53·7	54·4	54·9	54·7	53·7	52·6	52·4	53·2	54·4	52·8
4	43·6	46·4	50·0	48·1	50·1	49·9	50·9	52·9	52·3	53·0	54·0	55·8	57·6	58·7	61·4	61·2	57·0	54·9	53·8	52·8	52·8	50·9	49·9	48·8	52·8
5	51·5	55·2	54·3	50·1	49·3	50·2	51·3	51·1	51·6	52·3	54·8	55·9	56·4	55·7	55·0	54·5	53·0	53·2	53·2	51·9	51·5	51·9	52·4	52·7	52·9
6	53·0	53·4	53·5	53·5	53·4	52·9	52·4	51·9	51·9	52·1	53·6	55·1	56·1	55·3	54·1	54·0	54·3	54·7	55·2	54·1	51·4	49·1	46·7	43·7	52·7
7	50·1	52·9	54·0	54·3	54·2	53·3	51·8	52·0	52·0	52·4	55·2	58·4	60·8	63·4	60·5	58·0	60·0	57·8	53·7	48·4	47·0	38·8	43·2	42·7	53·1
8	46·1	51·0	53·9	53·8	53·1	53·0	52·5	52·9	52·5	52·4	54·7	56·7	58·6	59·5	64·4	67·8	68·6	63·1	48·2	49·6	26·9	34·1	45·0	46·6	52·7
9 d	47·9	52·6	54·8	53·8	50·9	53·2	51·9	51·7	52·2	52·3	55·5	54·8	57·1	58·6	60·2	53·0	61·0	54·1	54·8	60·0	45·0	40·0	39·5	33·1	52·0
10 d	30·9	41·1	44·0	51·0	51·3	49·9	50·3	52·4	56·5	51·0	52·6	53·7	56·9	55·2	54·8	55·5	55·2	54·0	53·1	52·9	48·0	46·1	45·9	49·7	*50·5*
11	51·2	52·6	51·9	51·7	53·2	48·2	51·3	51·6	52·3	52·7	53·8	54·1	54·7	55·6	52·3	54·3	54·6	54·3	53·7	48·8	51·3	48·9	48·7	48·3	52·1
12	47·3	47·0	52·8	52·2	52·9	52·5	51·9	53·3	54·9	52·5	52·7	51·3	51·9	55·0	53·6	52·7	53·3	54·1	53·3	52·2	51·5	49·5	45·9	43·3	51·6
13	53·0	51·7	52·0	52·5	52·1	52·4	52·3	52·3	51·9	51·7	52·5	54·1	54·7	54·9	55·2	55·6	56·1	55·8	54·0	53·5	51·2	49·9	50·2	48·9	52·9
14	52·1	54·1	51·6	51·4	51·3	51·6	52·7	52·5	53·8	53·2	54·3	56·7	56·6	58·4	58·6	57·8	58·3	50·4	54·8	50·8	52·1	51·9	48·3	48·6	*53·4*
15	53·9	52·7	52·3	53·5	52·8	52·8	52·7	52·9	52·5	52·2	52·7	54·4	55·2	55·9	55·4	54·8	54·9	55·4	51·8	49·2	47·9	50·7	50·7	45·1	52·6
16	45·0	48·5	50·5	51·3	51·1	53·5	53·8	54·2	53·5	53·4	54·1	53·2	54·2	55·8	54·9	55·5	53·2	53·0	53·9	52·3	52·3	46·3	49·1	50·2	52·2
17 q	51·6	52·5	52·7	52·6	52·5	52·9	52·4	52·3	52·3	52·5	53·4	53·8	55·1	56·3	55·2	54·6	54·8	54·0	54·0	52·9	51·8	50·3	49·8	51·3	53·0
18 q	52·3	52·4	53·5	53·7	51·8	52·3	51·9	51·8	51·8	52·6	53·8	55·0	55·4	55·3	54·5	54·0	53·6	53·2	53·0	52·8	52·4	52·2	52·4	52·5	53·1
19 q	52·6	52·9	53·5	53·4	53·6	52·5	52·4	52·8	53·5	52·8	53·3	54·1	54·6	54·9	54·6	54·2	54·1	53·9	53·6	53·1	52·7	52·4	52·0	51·4	53·3
20	52·5	50·2	59·4	51·8	51·6	51·7	52·1	52·4	52·5	52·8	53·9	55·0	54·4	56·3	55·9	56·3	57·1	54·7	47·9	53·6	50·2	50·6	50·4	43·6	52·8
21 d	42·1	51·0	49·6	56·4	55·7	64·3	58·1	56·3	55·1	56·1	59·4	59·6	60·9	61·7	61·8	58·1	52·4	51·2	44·2	48·5	45·4	42·7	41·8	46·3	53·3
22	48·5	47·9	60·3	56·1	49·6	52·7	53·7	57·1	56·1	53·9	55·6	54·3	52·2	55·1	54·7	54·0	54·2	53·5	53·4	49·3	48·8	51·0	51·4	51·8	53·1
23 d	52·1	52·4	53·3	51·8	55·2	50·0	52·0	54·7	58·0	55·6	53·4	53·5	59·1	58·4	61·3	44·5	55·5	36·1	45·1	50·7	46·0	45·2	49·8	52·0	51·9
24	54·9	54·7	52·2	52·0	52·9	53·5	55·6	57·0	58·3	56·1	55·1	57·2	54·0	55·7	52·6	56·0	54·4	46·3	47·1	51·0	49·1	49·4	47·2	46·0	52·8
25	50·6	49·4	54·3	49·4	50·7	51·2	51·5	52·0	53·0	54·5	56·7	56·1	56·0	54·9	53·5	54·4	52·7	51·1	52·1	52·1	49·9	50·0	45·9	45·9	52·0
26 d	45·0	46·5	49·8	50·6	55·1	54·2	54·7	53·6	54·5	58·2	58·5	57·4	57·5	57·2	56·0	56·0	57·9	53·4	41·0	50·6	49·0	47·5	40·2	41·3	51·9
27	48·7	51·4	51·9	52·5	54·7	54·9	53·2	53·4	53·8	53·1	53·0	53·9	54·1	54·9	53·8	53·4	53·0	52·9	52·9	52·5	51·9	45·5	45·4	50·5	52·3
28	51·0	52·1	52·0	54·7	53·1	52·0	53·0	53·4	53·1	52·4	53·1	54·3	55·1	57·0	56·4	54·5	53·4	52·5	52·9	51·3	52·0	51·4	51·2	52·0	53·1
29	52·0	52·1	52·9	53·1	51·8	52·1	52·3	52·4	52·4	52·9	54·4	55·3	56·5	55·1	55·1	52·9	51·9	50·8	53·2	53·0	50·9	48·6	49·0	50·4	52·6
30 q	51·8	52·5	53·0	53·0	52·7	52·6	52·0	52·0	52·0	52·6	53·0	53·9	54·6	54·6	54·0	53·2	53·0	52·8	52·6	52·4	51·8	50·4	49·8	51·0	52·6
31 q	52·3	51·9	50·2	51·9	51·9	52·0	51·9	51·7	51·4	51·5	52·3	53·6	54·4	54·5	53·9	53·0	53·1	52·9	52·6	52·2	51·9	51·7	51·7	52·2	52·4
Mean	49·4	51·0	52·5	52·4	52·4	52·6	52·6	52·9	53·3	53·1	54·2	55·0	55·8	*56·5*	56·1	55·0	55·3	53·2	52·0	51·7	49·7	48·5	48·2	*48·2*	52·6

52·2 at 0-1h. January 1, 1943.

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

50 LERWICK (V) — 46,000γ (0·46 C.G.S. unit) + — DECEMBER 1942

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	894	902	911	913	915	916	917	918	920	919	918	918	918	922	923	922	919	922	929	952	932	924	900	907	918
2	886	910	915	916	915	915	916	917	918	918	917	917	920	918	920	920	919	919	920	920	920	921	922	924	917
3	916	920	919	918	917	916	916	916	916	916	915	916	918	918	918	919	918	923	922	924	925	925	915	861	916
4	881	905	912	914	914	913	915	907	910	912	913	915	918	922	934	955	947	932	931	931	928	926	921	912	919
5	917	908	881	886	901	908	912	913	914	917	919	919	918	920	922	924	926	921	920	920	921	920	920	920	914
6	920	920	919	917	916	914	913	913	914	914	915	917	918	921	923	921	918	917	919	929	932	924	897	888	917
7	907	912	914	914	912	909	909	909	909	913	917	917	920	922	930	946	980	997	995	994	977	946	885	838	928
8	885	909	918	923	923	920	916	915	918	918	918	918	923	928	931	964	1017	1074	1047	1028	1015	920	902	907	943
9 d	913	909	921	902	904	917	918	920	918	918	917	917	917	924	959	957	937	1013	1056	1080	1067	1015	828	863	943
10 d	671	813	818	806	838	896	902	916	916	919	923	921	921	924	926	929	933	937	942	945	930	902	892	910	*893*
11	918	921	922	916	897	891	907	915	915	920	924	922	931	941	933	926	927	929	931	936	930	926	918	850	919
12	849	877	898	911	914	915	915	915	918	922	927	934	948	938	930	930	925	924	924	924	925	925	924	907	917
13	897	894	907	913	915	917	917	918	918	917	915	913	912	913	915	918	925	926	932	934	934	929	924	914	917
14	904	899	901	907	909	910	912	914	914	915	916	914	913	914	919	923	934	947	962	955	939	930	926	919	921
15	910	906	911	911	913	915	914	915	918	920	918	916	915	914	914	913	914	919	923	924	922	922	923	913	916
16	906	913	914	913	911	905	902	904	907	910	910	914	919	918	916	916	924	926	930	933	932	931	919	917	916
17 q	918	917	915	914	913	910	909	909	911	911	911	914	914	915	916	915	916	918	918	919	922	922	920	918	915
18 q	916	914	914	910	911	911	911	910	910	910	913	911	912	912	913	913	911	911	910	912	913	914	915	915	912
19 q	915	913	911	910	909	906	907	908	908	909	911	914	914	914	914	914	911	910	910	910	911	913	911	910	911
20	903	905	899	890	899	899	900	902	904	905	908	908	911	911	914	915	915	923	939	928	925	921	922	891	910
21 d	901	912	911	903	897	870	867	882	894	907	920	915	960	992	964	959	1008	990	979	938	925	909	892	872	924
22	887	868	832	826	864	884	900	904	906	909	918	930	933	934	936	937	931	927	931	936	928	917	915	915	907
23 d	916	917	917	914	915	905	902	912	918	934	949	951	1027	1003	1027	1015	980	1041	1019	978	940	908	910	904	*950*
24	880	885	904	911	912	914	913	915	912	926	919	927	925	933	963	971	956	948	932	926	920	901	875	887	919
25	901	897	840	868	899	910	915	916	917	920	923	921	920	931	940	937	946	954	949	933	932	916	901	899	916
26 d	878	861	876	891	840	860	879	904	911	915	920	924	932	942	968	960	955	958	979	952	931	885	873	836	910
27	879	903	911	912	905	902	900	905	909	910	915	916	916	920	925	923	921	923	923	925	926	927	925	920	914
28	911	910	911	910	906	910	914	916	918	916	915	912	916	921	922	922	924	926	927	927	926	923	920	916	917
29	916	915	915	911	912	914	914	916	917	916	915	918	920	920	919	920	925	931	924	925	926	930	926	919	919
30 q	917	915	915	915	916	918	918	918	919	920	920	918	912	914	915	915	915	916	917	919	921	925	924	917	917
31 q	911	899	905	907	908	909	911	911	914	915	917	916	913	912	914	914	916	915	916	917	918	918	918	917	913
Mean	*894*	902	902	902	904	906	908	911	913	916	918	919	924	927	931	933	935	942	*944*	941	936	923	908	900	918

915 at 0-1h. January 1, 1942.

Corrections to be applied to all values: H, −6γ; D, −4·2′; V, −5γ.

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

51 LERWICK — DECEMBER 1942

	TERRESTRIAL MAGNETIC ELEMENTS												3-hr. range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination			Vertical force							
	Maximum 14,000γ +		Minimum 14,000γ +		Range	Maximum 11° +	Minimum 11° +	Range	Maximum 46,000γ +		Minimum 46,000γ +		Range			
	h. m.	γ	γ	h. m.	γ	h. m. ′	′ h. m.	′	h. m.	γ	γ	h. m.	γ			°A.
1	22 32	417	366	0 8	51	14 2 57·5	38·9 19 17	18·6	19 25	959	883	0 47	76	2,0,0,1,1,1,4,3	12	1	75·0
2	0 5	409	369	1 14	40	13 14 55·6	46·4 0 34	9·2	23 58	927	877	0 12	50	3,1,1,1,0,0,0,1	7	0	74·3
3	22 50	442	372	23 49	70	23 5 61·9	39·7 24 0	22·2	20 7	928	854	24 0	74	3,0,0,0,0,2,1,4	10	0	74·0
4	23 17	403	359	14 43	44	15 11 66·0	38·3 0 5	27·7	16 0	971	851	0 5	120	3,2,2,1,2,3,1,2	16	0	74·0
5	17 53	397	375	2 45	22	1 45 58·8	48·4 4 41	10·4	16 15	927	878	2 34	49	2,2,0,1,1,1,1,0	8	0	74·4
6	22 32	404	374	20 52	30	12 32 56·7	39·0 23 2	17·7	20 21	934	876	22 51	58	0,0,0,1,1,0,2,3	7	0	75·2
7	5 52	404	321	23 9	83	13 20 64·8	30·2 21 7	34·6	17 20	1004	814	23 5	190	2,1,0,2,2,3,4,5	19	1	75·0
8	19 38	524	334	21 7	190	16 40 71·1	18·2 20 47	52·9	17 54	1086	857	0 0	229	3,1,2,1,3,5,5,4	24	1	75·7
9 d	19 10	*760*	*−16*	23 43	*776*	19 13 *79·6*	*−16·0* 23 56	*95·6*	19 4	*1127*	711	24 0	*416*	3,3,1,2,3,5,6,7	30	2	76·9
10 d	21 25	429	226	0 44	203	8 3 60·1	−1·0 0 0	61·1	20 15	950	*537*	0 15	413	6,4,3,2,2,2,3,3	25	1	77·9
11	22 56	438	342	13 55	96	13 41 57·8	41·0 23 50	16·8	13 31	946	839	23 43	107	1,3,2,2,3,1,3,4	19	1	78·1
12	23 16	405	350	12 28	55	13 46 57·5	38·2 23 47	19·3	12 34	955	845	0 1	110	3,1,2,3,2,2,1,3	17	1	78·7
13	23 4	405	355	0 14	50	16 1 58·1	43·2 0 0	14·9	19 59	937	882	0 45	55	3,0,0,1,0,2,2,2	10	0	78·9
14	6 59	403	369	17 58	34	16 16 61·0	43·3 23 10	17·7	18 52	968	897	1 43	71	2,1,1,1,2,3,2,3	15	1	79·0
15	16 28	405	366	0 38	39	0 36 57·8	43·0 23 29	14·8	19 1	933	902	1 12	31	2,1,0,1,1,1,3,3	12	0	79·0
16	22 27	403	369	16 56	34	16 10 56·9	35·4 21 52	21·5	17 3	940	898	6 1	42	2,2,1,2,1,3,1,3	15	0	79·0
17 q	15 39	398	379	22 17	19	13 21 56·9	48·5 21 55	8·4	22 19	924	908	7 0	16	0,0,0,1,1,1,0,2	5	0	79·1
18 q	18 17	400	380	0 0	20	3 3 56·1	51·0 0 9	5·1	0 8	919	907	3 27	12	1,1,1,1,0,0,0,0	4	0	79·3
19 q	22 40	403	384	2 16	19	13 4 54·1	49·9 23 16	*4·2*	22 31	917	906	5 32	*11*	0,0,1,2,0,0,0,1	4	0	79·5
20	23 28	463	371	2 23	92	2 38 63·7	37·7 23 26	26·0	18 6	949	867	23 34	82	3,2,2,1,0,3,3,3	17	1	79·4
21 d	22 27	418	328	12 25	90	5 32 73·1	30·2 21 34	42·9	16 54	1031	848	5 53	183	3,4,3,3,4,4,3,4	28	1	79·1
22	14 56	397	321	1 51	76	2 57 62·8	40·5 1 39	22·3	19 17	945	811	3 12	134	4,4,2,3,2,1,2,0	18	1	79·3
23 d	15 2	587	302	10 35	285	14 36 66·3	28·4 17 48	37·9	15 0	1113	890	21 28	223	1,3,3,4,5,6,4,4	30	1	79·2
24	22 3	431	337	14 18	94	15 25 61·0	36·2 18 4	24·8	15 36	974	867	0 54	107	3,1,2,3,3,4,4,3	23	1	79·0
25	21 40	399	332	2 29	67	2 24 64·7	41·0 22 37	23·7	17 52	959	805	2 42	154	4,3,1,2,2,2,2,3	19	1	79·2
26 d	20 49	420	317	22 33	103	16 24 62·8	33·4 18 22	29·4	18 16	995	815	23 22	180	3,3,3,2,3,4,4,4	26	1	79·0
27	6 31	399	371	0 0	28	5 32 56·6	42·3 22 16	14·3	21 40	933	848	0 0	85	3,2,1,1,1,0,1,3	12	0	78·9
28	5 21	397	370	3 11	27	13 27 57·9	49·4 19 43	8·5	18 13	931	904	4 31	27	1,2,0,1,1,1,1,0	7	0	78·3
29	6 45	395	373	13 20	22	12 37 56·9	46·6 21 57	10·3	17 20	935	910	3 30	25	0,1,0,1,1,2,2,2	9	0	78·1
30 q	18 31	391	376	11 8	*15*	13 15 54·8	48·1 21 49	6·7	21 20	926	874	12 56	52	0,0,0,0,0,0,1,1	2	0	76·9
31 q	1 32	398	375	11 11	23	1 3 55·1	48·9 2 0	6·2	22 30	919	894	1 34	25	2,1,0,0,0,0,0,0	3	0	76·0
Mean	− −	430	340	− −	90	− − 60·8	37·4 − −	23·4	− −	963	853	− −	110	1·8	14·6	0·52	77·6

q denotes an international quiet day and d an international disturbed day

DIURNAL INEQUALITIES OF THE TERRESTRIAL MAGNETIC ELEMENTS

ALL DAYS

Departures from the mean of the 24 hourly values (uncorrected for non-cyclic change)

52 LERWICK 1942

HORIZONTAL FORCE

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	-3·8	-5·4	-5·3	-1·1	+3·9	+6·1	*+7·4*	+5·9	+1·7	-3·2	-6·6	*-6·9*	-4·3	0·0	+1·6	+1·7	+2·4	+2·3	+3·5	+3·0	+0·8	-1·5	-0·6	-1·6
Feb.	-7·9	*-16·2*	-10·7	-4·3	-0·7	+3·0	+4·0	+2·9	-3·5	-7·4	-9·7	-10·4	-9·3	-2·2	+5·8	+9·3	*+26·8*	+16·8	+19·8	+14·1	-2·2	-5·8	-8·3	-3·9
Mar.	-26·6	*-34·0*	-31·8	-25·5	-8·2	+3·1	+5·9	-4·3	-19·1	-12·8	-13·3	-14·8	-5·0	+4·8	+14·1	+21·2	+28·5	+33·6	*+36·0*	+22·2	+12·1	+10·7	+7·8	-4·6
Apr.	-33·5	*-42·4*	-39·9	-12·4	+1·3	+7·3	+3·3	-4·0	-9·9	-20·8	-25·5	-24·9	-17·9	-2·0	+13·4	+28·0	+40·6	*+43·9*	+37·1	+26·7	+12·3	+15·0	+6·0	-1·7
May	-1·0	-6·5	-1·8	+0·8	+1·8	-1·1	-7·6	-12·4	-17·4	-23·8	*-26·4*	-25·3	-21·4	-11·0	-0·9	+10·6	+22·4	+30·3	*+31·7*	+27·2	+18·5	+9·2	+2·1	+2·0
June	-1·1	-6·5	-5·3	-1·8	-4·7	-6·0	-8·9	-15·8	-23·5	-29·6	*-30·1*	-25·0	-16·7	-5·6	+1·6	+14·1	+29·5	+33·8	*+34·2*	+27·9	+18·9	+11·4	+6·0	+3·2
July	-12·3	-10·9	-2·7	-3·5	-3·8	-7·7	-13·8	-14·8	-22·9	-28·5	*-29·5*	-25·2	-15·6	-5·6	+9·9	+20·9	+24·5	+30·6	+34·4	*+34·6*	+26·1	+14·9	+4·4	-3·5
Aug.	-5·0	-4·9	-7·3	-8·7	-6·0	-4·1	-6·0	-12·2	-17·3	-24·7	*-27·0*	-24·6	-12·5	-5·1	+7·2	+19·4	+17·4	+26·5	*+29·4*	+26·2	+19·2	+11·6	+8·3	+0·2
Sept.	-8·7	-7·2	-9·1	-8·1	-8·0	-1·1	+0·5	-3·7	-10·5	-19·6	*-24·2*	-18·5	-10·1	-1·9	+8·2	+15·0	+23·6	*+24·2*	+22·6	+16·5	+15·0	+11·0	+0·9	-6·8
Oct.	-14·0	*-23·0*	-18·1	-8·9	-3·5	+2·5	+3·7	-0·8	-3·7	-11·7	-17·1	-11·2	-4·6	-0·1	+12·2	*+38·0*	+30·8	+35·9	+27·4	+12·1	-2·7	-17·1	-8·7	-17·4
Nov.	*-15·8*	-13·7	-5·0	-6·1	+4·5	+8·7	*+8·9*	+5·5	-0·5	-5·3	-6·0	-6·9	-3·2	+0·8	+2·7	+5·7	+7·9	+7·6	+6·8	+5·7	+2·4	+1·1	-2·1	-3·7
Dec.	-5·7	-5·3	-5·3	-2·6	+0·9	+7·0	+8·8	+6·1	+1·8	-4·1	-7·2	-6·4	-3·8	-2·4	+1·0	+3·9	+3·0	+6·7	+4·8	*+9·5*	+4·5	+0·2	-5·6	*-9·8*
Year	-11·3	-14·7	-11·9	-6·9	-1·9	+1·5	+0·5	-4·0	-10·4	-16·0	*-18·5*	-16·7	-10·4	-2·5	+6·4	+15·7	+21·5	*+24·3*	+24·0	+18·8	+10·4	+5·1	+0·9	-4·0
Winter	-8·3	*-10·1*	-6·6	-3·5	+2·1	+6·2	+7·3	+5·1	-0·1	-5·0	-7·4	-7·7	-5·1	-0·9	+2·8	+5·1	*+10·0*	+8·3	+8·7	+8·1	+1·4	-1·5	-4·1	-4·7
Equinox	-20·7	*-26·7*	-24·7	-13·7	-4·6	+2·9	+3·3	-3·2	-10·8	-16·2	-20·0	-17·3	-9·4	+0·2	+12·0	+25·5	+30·9	*+34·4*	+30·8	+19·4	+9·2	+4·9	+1·5	-7·6
Summer	-4·9	-7·2	-4·3	-3·3	-3·2	-4·7	-9·1	-13·8	-20·3	-26·7	*-28·3*	-25·0	-16·5	-6·8	+4·5	+16·3	+23·5	+30·3	*+32·4*	+29·0	+20·7	+11·8	+5·2	+0·5

DECLINATION

	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
Jan.	-1·98	-1·45	-1·79	-1·82	-1·57	-0·88	-0·48	-0·11	+0·17	+0·79	+1·64	+2·42	+3·54	*+3·92*	+3·26	+2·73	+2·65	+2·13	+0·30	-0·81	-2·50	-3·16	*-3·98*	-3·02
Feb.	-2·17	-0·56	-1·87	-2·76	*-3·67*	-2·89	-1·73	-1·06	-0·49	+0·71	+1·90	+3·11	+4·30	*+4·58*	+4·32	+2·57	+1·87	+1·04	+0·57	+1·38	-1·40	-1·85	-3·49	-2·41
Mar.	-1·73	-2·55	*-3·91*	-2·59	-3·01	-2·16	-1·68	-0·19	-0·45	-2·44	+0·87	+2·80	+5·17	*+6·26*	+5·84	+3·98	+3·12	+0·06	+0·12	-0·15	-1·80	-1·72	-2·12	-1·72
Apr.	-3·69	*-5·14*	-3·29	-4·40	-3·71	-3·54	-3·58	-2·90	-2·80	-1·06	+0·64	+3·58	+7·17	*+8·69*	+7·67	+5·73	+3·92	+3·00	+0·29	-0·40	-0·55	-1·63	-1·79	-2·21
May	-2·38	-2·53	-2·75	-4·05	-4·70	*-5·12*	-4·66	-4·45	-3·70	-2·08	+0·45	+3·53	+5·86	*+6·67*	+6·38	+5·55	+4·84	+3·86	+2·48	+1·30	-0·15	-0·72	-1·50	-2·13
June	-0·90	-2·32	-4·38	-5·50	-5·56	-6·10	*-6·53*	-6·04	-4·88	-2·60	+0·27	+3·27	+5·50	+6·38	*+6·76*	+6·25	+4·79	+4·04	+3·70	+2·45	+1·35	+0·88	+0·21	-1·04
July	-2·26	-4·22	-4·43	-3·50	-4·31	-4·18	*-4·54*	-3·51	-3·20	-2·29	-0·06	+2·80	+5·35	*+6·54*	+6·05	+5·31	+4·35	+3·16	+2·74	+2·06	+0·73	-0·24	-0·59	-1·76
Aug.	-1·43	-1·65	-2·94	-2·94	-3·34	-4·39	*-4·53*	-4·27	-3·52	-1·73	+1·31	+4·57	+6·79	*+7·62*	+6·62	+5·20	+3·10	+1·89	+1·01	-0·52	-1·45	-1·35	-2·27	-1·78
Sept.	*-3·27*	-1·68	-1·81	-1·98	-2·32	-2·36	-2·44	-2·34	-2·14	-0·89	+0·97	+3·79	+6·34	+6·71	*+6·95*	+5·54	+3·16	+0·15	-1·84	-1·47	-1·89	-2·38	-2·51	-2·29
Oct.	-2·15	-0·11	-0·17	-1·42	-0·72	-0·09	+0·31	+0·53	-0·11	-0·22	+1·75	+4·05	*+6·07*	+6·03	+5·17	+2·30	+0·94	-2·45	-1·95	-2·76	-3·86	*-4·87*	-3·08	-3·19
Nov.	-3·05	-1·58	-1·07	-0·36	+0·25	+0·28	+0·41	+0·89	+0·91	+1·06	+2·27	+3·49	*+4·66*	+4·15	+3·99	+2·14	+1·29	+0·27	-1·74	-2·42	-4·07	-3·03	*-4·53*	-4·21
Dec.	-3·18	-1·55	-0·03	-0·17	-0·14	-0·01	0·00	+0·37	+0·74	+0·53	+1·62	+2·47	+3·26	*+3·92*	+3·56	+2·47	+2·73	+0·59	-0·55	-0·90	-2·88	-4·10	-4·35	*-4·40*
Year	-2·35	-2·11	-2·37	-2·62	*-2·73*	-2·62	-2·45	-1·92	-1·62	-0·85	+1·14	+3·32	+5·33	*+5·96*	+5·55	+4·15	+3·06	+1·48	+0·43	-0·19	-1·54	-2·01	-2·50	-2·51
Winter	-2·59	-1·29	-1·19	-1·28	-1·28	-0·87	-0·45	+0·02	+0·33	+0·77	+1·86	+2·87	+3·94	*+4·14*	+3·78	+2·48	+2·13	+1·01	-0·35	-0·69	-2·71	-3·03	*-4·09*	-3·51
Equinox	*-2·71*	-2·37	-2·29	-2·60	-2·44	-2·04	-1·85	-1·23	-1·37	-1·15	+1·06	+3·55	+6·19	*+6·92*	+6·41	+4·39	+2·79	+0·19	-0·85	-1·19	-2·03	-2·65	-2·37	-2·35
Summer	-1·74	-2·68	-3·63	-4·00	-4·48	-4·95	*-5·07*	-4·57	-3·83	-2·17	+0·49	+3·54	+5·87	*+6·80*	+6·45	+5·58	+4·27	+3·24	+2·48	+1·32	+0·12	-0·36	-1·04	-1·68

VERTICAL FORCE

	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	-7·4	-10·7	-9·9	-9·7	-11·2	*-11·9*	-10·9	-9·7	-7·2	-5·3	-3·2	-1·1	-0·7	+0·4	+4·3	+9·9	+12·0	+14·9	+14·5	+16·7	*+17·0*	+10·1	+3·1	-4·0
Feb.	-16·3	*-19·1*	-18·1	-13·9	-11·8	-9·3	-9·1	-8·2	-6·5	-5·8	-4·6	-1·9	-0·2	+1·3	+6·7	+18·6	+25·3	*+26·2*	+23·9	+22·1	+11·8	+5·3	-4·1	-12·3
Mar.	-33·9	*-53·9*	-47·8	-49·9	-35·1	-21·9	-13·3	-4·2	+0·2	+10·7	+11·0	+11·5	+13·1	+19·5	+27·0	+32·7	+38·2	*+47·6*	+41·3	+28·5	+12·2	+3·8	-14·9	-22·4
Apr.	-37·2	-41·0	*-45·0*	-30·6	-19·5	-14·4	-8·4	-6·3	-2·7	+1·0	+5·0	+8·4	+7·2	+14·5	+24·2	+35·2	+36·7	*+39·0*	+35·1	+25·2	+13·3	+2·1	-14·0	-27·8
May	-11·4	-12·7	*-13·2*	-7·5	-5·0	-4·1	-3·0	-4·1	-5·6	-5·0	-5·4	-6·6	-5·5	-2·0	+3·8	+11·1	+16·5	+19·8	*+20·3*	+16·6	+12·9	+4·7	-4·8	-9·8
June	-10·6	*-23·5*	-22·2	-15·9	-10·0	-8·1	-5·0	-2·1	-2·0	-3·5	-4·2	-6·3	-4·8	-1·2	+4·3	+9·9	+19·3	+22·4	*+23·1*	+21·5	+13·9	+8·8	+1·5	-5·3
July	-34·5	*-37·4*	-20·0	-11·0	-10·7	-9·5	-5·7	-4·4	-1·9	-1·0	+0·4	+0·9	+3·1	+7·3	+14·2	+17·0	+21·5	*+23·0*	+21·9	+22·0	+15·3	+9·5	-0·5	-19·5
Aug.	*-31·4*	-28·7	-23·4	-16·3	-12·8	-7·9	-1·2	+3·2	+3·8	+2·7	+0·9	-1·7	+0·5	+5·7	+11·9	+19·5	+27·3	+26·9	*+27·7*	+21·1	+14·8	-4·8	-13·9	-23·9
Sept.	-38·0	-32·0	-25·4	-20·8	-18·1	-11·0	-6·4	-1·1	+2·3	+5·7	+7·6	+8·0	+8·8	+12·9	+16·9	+26·6	+35·9	*+39·9*	+32·6	+21·3	+13·4	-3·9	-31·4	*-43·8*
Oct.	-40·8	*-43·2*	-38·2	-31·3	-23·3	-16·6	-8·3	-2·9	-1·3	+4·5	+8·3	+13·3	+18·8	+24·8	+34·0	+47·6	*+53·6*	+40·0	+25·8	+18·4	+2·7	-19·0	-32·4	-34·5
Nov.	*-30·4*	-28·7	-22·5	-23·1	-20·0	-13·8	-9·0	-5·9	-2·2	+2·1	+5·3	+6·2	+9·5	+16·1	+20·9	*+29·4*	+24·7	+24·1	+25·2	+18·7	+9·1	-0·3	-12·1	-23·3
Dec.	*-24·0*	-16·8	-16·5	-16·3	-14·4	-11·9	-10·0	-6·9	-5·1	-2·5	-0·4	+0·4	+6·0	+8·5	+12·8	+14·4	+16·9	+24·2	*+25·4*	+22·8	+17·3	+4·7	-9·8	-18·8
Year	-26·3	*-29·0*	-25·2	-20·5	-16·0	-11·7	-7·5	-4·4	-2·3	+0·3	+1·7	+2·6	+4·7	+9·0	+15·1	+22·7	+27·3	*+29·0*	+26·4	+21·2	+12·8	+1·7	-11·1	-20·5
Winter	*-19·5*	-18·8	-16·7	-15·7	-14·3	-11·7	-9·7	-7·7	-5·3	-2·9	-0·7	+0·9	+3·7	+6·6	+11·2	+18·1	+19·7	*+22·3*	+22·3	+20·1	+13·8	+4·9	-5·7	-14·6
Equinox	-37·5	*-42·5*	-39·1	-33·1	-24·0	-16·0	-9·1	-3·6	-0·4	+5·5	+8·0	+10·3	+12·0	+17·9	+25·5	+35·5	+41·1	*+41·6*	+33·7	+23·3	+10·4	-4·3	-23·2	-32·1
Summer	-22·0	*-25·6*	-19·7	-12·7	-9·6	-7·4	-3·7	-1·9	-1·4	-1·7	-2·1	-3·4	-1·7	+2·5	+8·5	+14·4	+21·1	+23·0	*+23·3*	+20·3	+14·2	+4·5	-4·4	-14·6

INTERNATIONAL QUIET DAYS

Departures from the mean of the 24 hourly values (uncorrected for non-cyclic change)

53 LERWICK 1942

HORIZONTAL FORCE

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	−2·8	−4·3	−4·8	−2·9	−1·0	+2·1	+3·8	+2·9	+2·4	−1·1	−4·4	*−6·3*	−5·4	−0·1	+2·0	+3·1	+2·6	*+6·5*	+4·4	+4·1	+2·4	−0·5	−0·6	−2·1
Feb.	−3·0	−4·3	−4·4	−2·7	+0·3	+2·2	+3·3	+1·9	−2·4	−4·7	*−8·2*	−7·1	−5·2	−0·9	−0·8	+0·5	−0·1	+2·2	+4·7	*+7·1*	+7·0	+5·3	+6·2	+3·1
Mar.	+4·5	+5·1	+3·7	+1·7	+4·5	+6·6	+7·9	+3·5	−5·1	−15·1	−22·7	*−26·3*	−22·9	−19·1	−7·9	+2·3	+2·7	+7·4	+12·1	*+13·9*	+12·7	+12·3	+9·5	+8·7
Apr.	+6·8	+4·0	+0·8	+1·8	+3·6	+1·7	+2·2	−1·6	−10·2	−24·0	−33·0	*−37·6*	−31·2	−15·8	−3·8	+2·4	+9·2	+17·5	*+22·4*	+21·0	+19·0	+16·6	+14·6	+13·6
May	+3·3	+1·4	+2·7	+4·3	+5·1	+3·2	−1·9	−6·9	−15·5	−24·6	*−29·7*	−28·9	−23·7	−14·4	−5·3	+0·7	+14·3	+22·2	*+23·7*	+18·5	+16·9	+13·2	+11·1	+10·3
June	+5·6	+4·5	+3·7	+2·6	+0·7	−1·7	−6·4	−13·3	−21·9	*−28·8*	−27·7	−21·5	−13·8	−7·5	−2·1	+7·4	+12·9	+14·3	+18·8	*+19·3*	+17·1	+14·6	+12·9	+10·3
July	+3·0	+3·0	+0·8	+4·7	+3·8	+1·2	−2·8	−8·6	−15·3	−26·2	*−30·4*	−28·8	−24·8	−16·4	−8·3	+3·4	+13·8	+19·4	+24·4	*+25·6*	+22·5	+15·4	+11·4	+9·2
Aug.	+3·0	−0·7	+0·1	+3·4	+4·1	+1·7	−2·6	−5·9	−11·9	−19·0	*−23·7*	−23·1	−18·4	−11·1	−4·5	+1·4	+7·5	+15·7	*+18·2*	+17·1	+15·1	+12·4	+12·7	+8·5
Sept.	+7·0	+4·7	+4·2	+3·1	+4·7	+7·2	+8·9	+5·3	−1·6	−15·3	−26·8	*−29·1*	−26·4	−16·5	−7·2	+1·1	+8·5	+8·2	+8·5	+9·1	+9·8	+10·5	+10·4	*+11·7*
Oct.	+0·1	−4·9	−0·9	+0·9	+2·5	+3·5	+4·7	+0·5	−7·7	−17·3	*−18·1*	−15·7	−10·9	−6·3	−0·9	+2·7	+6·9	*+9·5*	+9·3	+9·1	*+9·5*	+9·1	+6·3	+8·1
Nov.	−1·4	−4·3	−3·0	−0·2	+3·0	+3·7	+3·2	+3·8	−0·4	−4·5	−6·8	*−8·0*	−6·2	−0·9	+0·8	+2·6	+2·8	+4·3	+4·0	0·0	+2·6	*+4·5*	+1·8	−1·4
Dec.	−4·5	−3·3	−4·5	−2·7	−0·7	+2·2	*+4·1*	+3·5	+2·5	−0·3	−3·1	*−5·7*	−3·9	−0·1	+2·7	*+4·1*	+3·5	+3·0	+3·5	+1·7	+1·1	−0·7	−0·3	−2·1
Year	+1·8	+0·1	−0·1	+1·2	+2·5	+2·8	+2·0	−1·2	−7·3	−15·1	−19·5	*−19·8*	−16·1	−9·1	−2·9	+2·6	+7·1	+10·9	*+12·8*	+12·2	+11·3	+9·4	+8·0	+6·5
Winter	−2·9	−4·1	−4·2	−2·1	+0·4	+2·5	+3·6	+3·0	+0·5	−2·7	−5·6	*−6·8*	−5·2	−0·5	+1·2	+2·6	+2·2	+4·0	*+4·1*	+3·2	+3·3	+2·1	+1·8	−0·6
Equinox	+4·6	+2·2	+1·9	+1·9	+3·8	+4·7	+5·9	+1·9	−6·1	−17·9	−25·1	*−27·2*	−22·9	−14·4	−4·9	+2·1	+6·8	+10·7	+13·1	*+13·3*	+12·7	+12·1	+10·2	+10·5
Summer	+3·7	+2·1	+1·8	+3·7	+3·4	−1·1	−3·4	−8·7	−16·1	−24·7	*−27·9*	−25·6	−20·2	−12·3	−5·1	+3·2	+12·1	+17·9	*+21·3*	+20·1	+17·9	+13·9	+12·0	+9·6

DECLINATION

	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
Jan.	−1·49	−0·96	−0·79	−1·11	−1·13	−0·72	−0·79	−1·01	−1·03	−0·32	+0·93	+1·89	*+2·41*	+2·30	+2·01	+1·39	+1·25	+1·24	+1·11	+0·69	−0·11	−1·60	*−2·67*	−1·49
Feb.	−0·69	−0·85	+0·13	−0·63	−1·07	−1·46	−1·85	−1·59	−1·09	+0·15	+1·49	*+2·99*	+2·79	+2·51	+1·11	+0·17	+0·11	+0·48	+0·55	+0·25	−0·17	−0·37	−1·05	*−1·91*
Mar.	+0·41	−0·40	−1·72	−0·79	−1·92	−2·12	−2·45	−3·02	*−3·22*	−2·75	−0·16	+3·06	+5·53	*+5·72*	+4·46	+2·75	+1·10	+0·50	+0·33	−0·86	−1·66	−1·01	−0·78	−1·00
Apr.	−0·33	−0·24	−0·60	−1·93	−3·04	−4·28	−5·01	*−5·08*	−4·74	−3·57	−1·22	+1·88	+4·81	*+6·02*	+5·42	+3·67	+2·66	+1·86	+1·47	+1·18	+1·06	+0·85	+0·06	−0·90
May	−0·74	−1·32	−1·51	−2·48	−3·72	−4·96	−5·24	*−5·50*	−4·85	−2·92	+0·26	+3·46	+5·76	*+6·00*	+4·89	+3·50	+2·56	+1·72	+1·54	+1·26	+1·05	+0·76	+0·44	+0·04
June	−1·04	−1·83	−2·94	−3·57	−3·49	*−6·16*	−5·83	−5·55	−4·78	−3·01	−0·38	+2·73	+4·62	*+5·27*	+5·20	+4·51	+3·73	+3·06	+2·69	+2·25	+1·74	+1·53	+1·08	+0·17
July	−0·98	−1·79	−2·09	−3·36	−4·35	−5·59	*−5·84*	−5·49	−4·93	−3·08	−0·51	+2·21	+4·76	+6·15	*+6·31*	+4·86	+3·93	+3·25	+2·72	+2·15	+1·13	+0·66	+0·05	−0·17
Aug.	−1·93	−1·34	−1·67	−2·37	−2·83	−3·48	*−4·01*	*−4·01*	−3·55	−1·52	+0·41	+2·89	+4·63	*+5·38*	+4·89	+3·57	+2·55	+1·46	+1·19	+1·01	+0·25	+0·30	−0·45	−1·37
Sept.	−3·14	−1·87	−1·08	−1·62	−2·00	−2·27	−3·16	−4·22	*−4·30*	−2·85	−0·56	+3·16	+6·12	*+7·33*	+7·08	+5·94	+4·22	+1·81	+0·60	−0·04	−0·52	−2·35	−2·88	−3·40
Oct.	−1·28	−1·10	−2·15	−1·96	−1·98	−1·98	−2·02	−2·40	−2·47	−1·18	+1·60	+3·78	*+5·36*	+4·88	+3·75	+2·60	+1·94	+1·82	+0·92	+0·06	−0·87	−2·32	−2·36	*−2·64*
Nov.	−0·65	−0·99	−0·87	−0·81	−0·85	−1·13	−1·05	−0·43	−0·31	+0·17	+1·39	+2·39	+2·67	*+2·81*	+2·61	+2·01	+2·07	−0·09	+0·23	−0·79	*−2·75*	−2·13	−1·67	−1·83
Dec.	−0·73	−0·42	−0·27	+0·06	−0·36	−0·39	−0·74	−0·74	−0·65	−0·46	+0·31	+1·22	+1·97	*+2·26*	+1·59	+0·94	+0·86	+0·51	+0·30	−0·18	−0·73	−1·46	*−1·71*	−1·18
Year	−1·05	−1·09	−1·30	−1·71	−2·23	−2·88	−3·17	*−3·25*	−2·99	−1·78	+0·30	+2·64	+4·29	*+4·72*	+4·11	+2·99	+2·25	+1·47	+1·14	+0·58	−0·13	−0·59	−0·99	−1·31
Winter	−0·89	−0·81	−0·45	−0·62	−0·85	−0·93	−1·11	−0·94	−0·77	−0·11	+1·03	+2·12	+2·46	*+2·47*	+1·83	+1·13	+1·07	+0·53	+0·55	−0·01	−0·94	−1·39	*−1·77*	−1·60
Equinox	−1·09	−0·90	−1·39	−1·57	−2·23	−2·66	−3·16	*−3·68*	*−3·68*	−2·59	−0·09	+2·97	+5·45	*+5·99*	+5·18	+3·74	+2·48	+1·50	+0·83	+0·09	−0·50	−1·21	−1·49	−1·99
Summer	−1·17	−1·57	−2·05	−2·95	−3·60	−5·05	*−5·23*	−5·14	−4·53	−2·63	−0·05	+2·82	+4·94	*+5·70*	+5·32	+4·11	+3·19	+2·37	+2·03	+1·67	+1·04	+0·81	+0·28	−0·33

VERTICAL FORCE

	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	+2·2	+0·9	+0·1	+0·6	−0·7	−1·3	−2·0	−1·9	*−2·5*	−2·4	−2·1	−0·3	−0·6	−1·9	−0 5	+0·4	−0·3	−0·9	+1·2	+1·7	+2·9	*+5·8*	+2·3	−0·7
Feb.	+0·4	+0·6	+1·1	+0·2	−0·4	−1·2	−1·8	−2·0	*−2·1*	−2·0	−1·4	−0·8	−0·4	−0·6	+1·3	*+3·0*	+2·6	+1·4	+1·2	+0·6	+0·9	+1·0	−0·8	−0·8
Mar.	−2·2	−4·8	−2·4	−5·0	*−10·8*	−8·2	−5·0	−1·0	+0·2	+2·2	+1·0	−1·6	−0·8	+1·2	+3·2	+5·6	*+6·4*	+5·0	+3·4	+4·8	+5·0	+2·8	+1·8	−0·8
Apr.	−2·9	−1·2	+0·2	+0·9	+2·0	+3·6	+2·5	+2·2	+0·8	+0·5	−1·0	−3·8	−9·1	*−10·6*	−7·6	−2·7	+0·4	+2·2	+4·1	*+5·6*	+5·0	+4·5	+3·6	+0·8
May	−3·3	+0·1	+1·6	+2·9	+4·1	+3·3	+1·9	−0·1	−3·6	−6·1	−7·9	*−10·5*	−8·9	−7·3	−3·8	+2·1	+5·7	+7·5	*+9·9*	+8·5	+5·6	+2·5	−0·5	−3·7
June	+2·1	+2·3	+3·6	+4·1	+3·3	+1·3	−0·5	−0·7	−2·8	−5·9	−6·7	*−7·3*	−6·5	−4·7	−3·4	−2·7	−0·3	+2·5	+3·7	*+4·9*	+4·2	+3·9	+2·9	+2·7
July	−0·4	−1·7	−1·0	+0·2	+2·4	+2·3	+2·6	+3·4	+2·8	−0·7	−4·6	−9·8	*−10·4*	−8·9	−7·8	−5·0	+1·4	+5·7	+7·2	+7·0	*+8·2*	+4·9	+2·8	−0·6
Aug.	−7·1	−5·1	−1·8	+1·1	+2·3	+3·5	+4·5	+4·5	+2·0	−0·5	−2·7	−6·9	*−10·3*	−8·7	−3·0	+2·9	+4·1	+4·7	+5·7	+6·1	*+6·8*	+2·3	−0·5	−3·9
Sept.	−10·9	−7·9	−4·9	−2·9	−1·5	+0·3	+0·3	+1·3	−0·1	−0·9	−2·9	−6·7	−7·1	−7·3	−2·5	+4·1	+11·3	*+20·1*	+14·3	+11·1	+8·1	+4·3	−6·1	*−13·5*
Oct.	−3·6	*−10·0*	−6·2	−1·6	0·0	−0·2	−1·0	−0·4	+0·4	+0·4	−2·0	−1·0	−0·2	+0·6	+2·8	+4·8	*+5·0*	+3·8	+3·8	+3·4	+3·4	+1·6	+1·4	−5·2
Nov.	*−21·6*	−11·8	−4·8	−2·4	−2·6	−2·7	−3·2	−4·6	−3·8	−3·2	−2·2	−0·8	+1·8	+3·0	+5·2	+7·8	+9·2	*+9·9*	+8·2	+9·8	+8·8	+3·2	+0·8	−4·0
Dec.	+1·6	−2·1	−1·8	−2·5	−2·4	*−2·9*	−2·6	−2·5	−1·4	−0·7	+0·6	+0·9	−0·8	−0·3	+0·6	+0·5	0·0	+0·3	+0·4	+1·7	+3·2	*+4·7*	+3·8	+1·7
Year	−3·8	−3·4	−1·4	−0·4	−0·4	−0·2	−0·4	*−0·1*	−0·8	−1·6	−2·7	−4·1	*−4·4*	−3·8	−1·3	+1·7	+3·8	+5·2	+5·3	*+5·4*	+5·2	+3·5	+1·0	−2·3
Winter	*−4·3*	−3·1	−1·3	−1·0	−1·5	−2·0	−2·4	−2·7	−2·5	−2·1	−1·3	−0·3	0·0	+0·1	+1·7	+2·9	+2·9	+2·7	+2·7	+3·5	*+3·9*	+3·7	+1·5	−0·9
Equinox	−4·9	*−6·0*	−3·3	−2·1	−2·6	−1·1	−0·8	+0·5	+0·3	+0·5	−1·2	−3·3	−4·3	−4·0	−1·0	+2·9	+5·8	*+7·8*	+6·4	+6·2	+5·4	+3·3	+0·2	−4·7
Summer	−2·2	−1·1	+0·6	+2·1	+3·0	+2·6	+2·1	+1·8	−0·4	−3·3	−5·5	−8·6	*−9·0*	−7·4	−4·5	−0·7	+2·7	+5·1	*+6·6*	*+6·6*	+6·2	+3·4	+1·2	−1·4

INTERNATIONAL DISTURBED DAYS

Departures from the mean of the 24 hourly values (uncorrected for non-cyclic change)

54 LERWICK 1942

HORIZONTAL FORCE

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	−2·6	−6·5	*−16·1*	−6·2	+9·9	*+11·7*	+11·2	+2·7	−9·9	−12·2	−15·1	−6·9	+1·2	+5·1	+3·9	+0·6	+5·3	+6·5	+10·8	+10·1	+6·9	−0·8	−6·1	−3·5
Feb.	−17·2	*−69·5*	−37·6	−16·7	−8·4	−4·3	+3·4	−3·3	−17·8	−16·9	−18·8	−25·9	−29·4	−0·1	+24·8	+41·7	*+136·6*	+76·1	+84·0	+55·3	−30·8	−37·7	−52·4	−35·1
Mar.	−104·0	*−109·4*	−93·6	−61·8	−19·2	−11·7	−8·8	−36·8	−93·8	−14·0	+15·0	+14·0	+31·6	+59·6	+66·2	+69·0	+88·4	+107·1	*+129·6*	+36·2	−11·8	+12·6	−8·4	−56·0
Apr.	−60·1	−91·1	*−119·6*	−68·5	−19·1	+4·9	−24·5	−37·7	−22·0	−27·3	−28·9	−10·3	−6·9	+41·1	+59·6	+92·9	*+122·7*	+95·9	+52·9	+20·5	−13·8	+22·1	+16·3	+0·9
May	−11·3	*−35·9*	+0·5	+5·7	+6·1	−7·0	−23·5	−15·7	−17·7	−26·1	−23·1	−20·7	−14·1	+0·7	+12·3	+30·7	+42·9	+47·6	*+50·3*	+40·1	+15·7	−11·5	−25·5	−20·5
June	−6·0	−19·9	−16·8	−10·3	−17·6	−15·7	−15·4	−23·7	−28·4	−34·1	*−36·0*	−30·7	−16·4	+4·3	+8·2	+29·7	*+73·4*	+65·9	+64·4	+43·9	+11·6	−4·5	−13·4	−12·5
July	−22·3	−3·0	−1·9	−5·5	−7·5	−13·0	−41·3	−29·7	−45·5	*−46·8*	−36·7	−26·7	−12·7	+2·8	+53·7	*+72·3*	+51·3	+43·8	+45·1	+45·3	+24·7	+9·6	−15·1	−40·9
Aug.	−26·4	−18·1	−13·2	*−36·9*	−23·7	−12·2	−10·5	−18·3	−22·0	−33·9	−31·6	−26·3	−3·2	−1·7	+15·8	*+64·1*	+46·7	+58·2	+56·7	+33·9	+19·4	+4·9	−2·0	−19·7
Sept.	−31·2	−17·4	−24·0	−22·0	−17·0	−1·0	−5·4	−12·6	−25·2	*−37·0*	−35·2	−15·8	+4·0	+15·0	+19·0	+36·6	+48·2	*+52·6*	+40·8	+27·0	+25·2	+17·6	−16·4	−25·8
Oct.	−20·2	−25·7	−44·0	−32·2	−25·0	+1·9	−5·6	−28·8	−8·4	−12·5	−23·2	+1·4	+18·8	+0·9	+26·6	+146·0	+125·2	*+152·9*	+104·8	+24·6	−61·6	*−131·5*	−58·4	−126·0
Nov.	*−61·4*	−51·8	−6·6	−33·8	+5·2	+15·3	+16·6	+2·8	−4·6	−1·2	+5·6	+6·8	+13·8	+16·2	+21·2	+20·8	*+25·6*	+19·1	+14·6	+19·2	+2·4	−3·2	−20·0	−22·6
Dec.	−17·0	−3·3	−5·4	−5·3	+0·2	+16·5	+20·4	+9·5	+0·2	−6·7	−16·8	−6·9	−1·0	−1·9	+4·2	+11·3	+1·8	+22·1	+14·2	*+42·1*	+15·4	+6·7	−40·8	*−59·5*
Year	−31·6	*−37·6*	−31·5	−24·5	−9·7	−1·2	−6·9	−16·0	−24·6	−22·4	−20·4	−12·3	−1·2	+11·8	+26·3	+51·3	*+64·0*	+62·3	+55·7	+33·2	+0·3	−9·6	−20·2	−35·1
Winter	−24·5	*−32·8*	−16·4	−15·5	+1·7	+9·8	+12·9	+2·9	−8·0	−9·3	−11·3	−8·2	−3·9	+4·8	+13·5	+18·6	*+42·3*	+30·9	+30·9	+31·7	−1·5	−8·7	−29·8	−30·2
Equinox	−53·9	−60·9	*−70·3*	−46·1	−20·1	−1·5	−11·1	−29·0	−37·3	−22·7	−18·1	−2·7	+11·9	+29·1	+42·9	+86·1	+96·1	*+102·1*	+82·0	+27·1	−15·5	−19·8	−16·7	−51·7
Summer	−16·5	−19·2	−7·9	−11·7	−10·7	−12·0	−22·7	−21·9	−28·4	*−35·2*	−31·9	−26·1	−11·6	+1·5	+22·5	+49·2	+53·6	+53·9	*+54·1*	+40·8	+17·9	−0·4	−14·0	−23·4

DECLINATION

	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
Jan.	−1·93	−2·61	−2·36	−3·75	−2·47	−1·17	+1·53	+2·87	+3·72	+3·75	*+4·25*	+3·23	+3·79	+4·09	+2·48	+2·05	+2·45	+1·85	+0·21	−1·75	−2·00	−4·41	*−8·99*	−4·83
Feb.	−4·97	−1·84	−7·55	−5·58	−7·22	−4·91	−2·86	−0·44	+1·05	+2·46	+2·81	+4·94	+7·23	+9·16	*+9·91*	+5·74	+4·50	+1·27	−2·78	+2·88	−3·31	−2·90	*−7·57*	−0·02
Mar.	+2·64	−9·27	−6·97	+0·86	+0·47	+1·51	+3·34	*+9·05*	+3·37	*−12·64*	−1·67	−3·69	−0·38	+1·85	+3·89	+1·38	+2·89	+0·03	+1·96	+2·37	−1·67	−0·34	−0·63	+1·65
Apr.	−9·25	*−15·30*	−13·94	−12·41	−6·36	−2·04	−0·23	+5·18	+1·56	+2·91	+3·12	+5·06	+10·37	*+11·62*	+11·14	+8·29	+6·24	+6·48	−0·15	−0·34	−0·04	−4·49	−4·90	−2·52
May	−6·41	−6·53	−6·92	−7·07	*−7·55*	−4·81	−1·73	−0·63	−1·68	−0·47	+2·29	+5·73	+8·39	*+9·81*	+8·80	+7·89	+7·45	+5·71	+3·15	+2·29	−1·22	−3·47	−7·09	−5·93
June	+0·65	−2·64	−5·44	*−8·69*	−7·20	−5·80	−7·47	−6·56	−6·42	−3·95	−0·44	+4·32	+6·99	+7·78	+9·54	*+9·73*	+7·60	+6·32	+5·27	+3·04	−0·22	−0·21	−1·46	−4·74
July	−7·06	*−10·08*	−8·59	−4·06	−5·14	−4·30	−4·26	−0·58	−1·77	−0·84	+1·40	+3·96	+7·32	*+8·54*	+6·91	+6·16	+6·24	+3·00	+3·22	+3·34	−0·23	−2·56	+0·22	−0·84
Aug.	−0·84	−0·89	−4·62	−1·38	−2·64	−5·97	−5·02	−3·22	−3·34	−2·51	+1·40	+4·88	+7·54	+9·17	*+10·18*	+7·38	+4·78	+4·65	+1·74	−3·34	*−6·38*	−3·29	−5·10	−3·18
Sept.	*−5·97*	−4·75	−2·71	−4·27	−4·09	−0·50	−1·01	+0·71	+1·05	+1·17	+1·21	+3·75	+7·31	+6·43	*+8·77*	+6·57	+2·57	−1·10	−3·57	−2·77	−3·39	−3·25	−2·61	+0·45
Oct.	−3·50	−0·95	−0·44	−3·69	+0·48	+0·63	+1·42	+5·17	+3·62	+1·43	+2·18	+4·25	+8·78	+11·11	*+11·14*	+4·79	+1·46	−5·09	+2·74	−8·19	−7·82	*−11·67*	−8·84	−9·01
Nov.	−6·92	+0·50	−2·08	+1·56	+5·58	+4·32	+3·52	+4·64	+4·72	+3·10	+3·66	+4·50	*+6·30*	+3·18	+3·68	+1·50	−0·92	−4·54	−4·48	−6·74	−4·58	−1·94	*−9·84*	−8·72
Dec.	−8·32	−3·20	−1·62	+0·80	+1·72	+2·41	+1·52	+1·82	+3·34	+2·72	+3·96	+3·88	+6·38	+6·30	*+6·90*	+1·50	+4·48	−2·15	−4·28	+0·62	−5·24	−7·62	*−8·48*	−7·44
Year	−4·32	−4·80	−5·27	−3·97	−2·87	−1·72	−0·94	+1·50	+0·77	−0·24	+2·01	+3·73	+6·67	+7·42	*+7·78*	+5·25	+4·15	+1·37	+0·25	−0·72	−3·01	−3·85	*−5·44*	−3·76
Winter	−5·53	−1·79	−3·40	−1·74	−0·60	+0·16	+0·93	+2·22	+3·21	+3·01	+3·67	+4·14	*+5·93*	+5·68	+5·74	+2·70	+2·63	−0·89	−2·83	−1·25	−3·78	−4·22	*−8·72*	−5·25
Equinox	−4·02	*−7·57*	−6·01	−4·88	−2·37	−0·10	+0·88	+5·03	+2·40	−1·78	+1·21	+2·34	+6·52	+7·75	*+8·73*	+5·26	+3·29	+0·08	+0·25	−2·23	−3·23	−4·94	−4·25	−2·36
Summer	−3·41	−5·03	*−6·39*	−5·30	−5·63	−5·22	−4·62	−2·75	−3·30	−1·94	+1·16	+4·72	+7·56	+8·83	*+8·86*	+7·79	+6·52	+4·92	+3·35	+1·33	−2·01	−2·38	−3·36	−3·67

VERTICLE FORCE

	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	+2·4	−12·3	−18·6	−26·3	*−26·9*	−19·0	−20·9	−20·1	−14·6	−11·9	−5·4	−0·3	+1·6	+4·9	+13·4	+27·5	+24·7	+23·8	+22·5	*+31·3*	+31·2	+7·5	0·0	−14·5
Feb.	−31·3	−42·2	*−50·4*	−39·3	−33·8	−23·2	−23·7	−20·2	−14·0	−13·3	−12·0	−2·8	+1·1	+0·6	+19·8	+70·9	*+102·0*	+100·2	+72·9	+48·8	+8·0	−22·7	−49·6	−45·8
Mar.	−105·7	*−144·3*	−119·9	−119·1	−47·3	−33·5	−27·7	−10·7	+7·5	+57·1	+48·1	+46·7	+53·1	+65·5	+64·9	+73·1	+77·3	*+93·7*	+79·1	+41·7	−3·3	+4·7	−43·3	−57·7
Apr.	−56·4	−69·7	−67·2	*−81·5*	−75·8	−67·1	−42·2	−38·3	−24·0	−7·3	+16·0	+41·9	+40·2	+53·9	+74·6	*+100·9*	+80·0	+73·1	+48·8	+33·5	+11·4	+7·5	−18·2	−34·1
May	−21·7	*−36·8*	−24·9	−17·0	−12·8	−12·3	−12·2	−16·6	−12·1	−3·2	−1·5	−0·2	+0·1	+9·6	+19·1	+29·2	+41·6	*+54·1*	+45·2	+25·0	+23·3	−14·2	−25·5	−36·2
June	−13·1	−38·0	*−45·7*	−32·0	−19·4	−23·3	−14·4	−8·4	−6·3	−4·6	−5·3	−11·2	−11·3	−2·4	+13·3	+26·6	+47·6	+51·3	*+58·0*	+53·0	+26·1	+8·0	−13·7	−34·8
July	−51·4	−50·7	−29·2	−19·4	−24·6	−20·7	−23·0	−33·2	−23·8	−15·9	−4·8	+6·2	+14·4	+28·9	+52·0	*+60·0*	+56·8	+52·5	+37·8	+37·6	+17·4	+3·1	−11·2	*−58·8*
Aug.	−63·0	*−65·4*	−53·7	−52·2	−39·0	−26·8	−7·0	+2·6	+7·9	+13·4	+12·6	+9·2	+16·0	+24·8	+25·9	+43·2	+63·2	+59·6	*+72·4*	+46·8	+25·7	−14·2	−38·8	−63·2
Sept.	−79·4	−66·4	−39·7	−38·8	−34·4	−14·0	−14·4	−7·0	+4·7	+12·6	+20·2	+28·8	+28·8	+41·6	+43·1	+60·8	*+67·0*	+63·2	+50·2	+42·6	+30·3	−13·8	−85·2	*−100·8*
Oct.	−65·2	−58·1	−59·1	−67·0	−63·5	−28·1	−7·6	+1·9	−8·7	+5·0	+21·5	+40·1	+47·8	+49·7	+68·5	+97·4	*+135·9*	+96·9	+52·6	+37·3	−26·7	−69·2	−98·5	*−102·9*
Nov.	−57·6	−59·4	−54·3	*−80·8*	−75·8	−45·0	−15·6	−1·6	+9·7	+20·6	+33·8	+30·8	+40·4	+56·4	+59·1	+69·6	*+73·8*	+59·4	+50·4	+39·2	+3·1	−14·2	−70·0	−72·0
Dec.	*−67·7*	−41·1	−34·9	−40·3	−44·7	−33·8	−29·9	−16·7	−12·1	−4·9	+2·3	+2·1	+27·9	+33·5	+45·3	+40·5	+39·1	+64·4	*+71·5*	+55·1	+35·1	+0·3	−44·5	−46·5
Year	−50·8	*−57·0*	−49·8	−51·1	−41·5	−28·9	−19·9	−14·0	−7·1	+4·0	+10·5	+15·9	+21·7	+30·6	+41·6	+58·3	*+67·4*	+66·0	+55·1	+41·0	+15·1	−9·8	−41·5	−55·6
Winter	−38·5	−38·7	−39·5	*−46·7*	−45·3	−30·3	−22·5	−14·7	−7·7	−2·4	+4·7	+7·5	+17·7	+23·9	+34·4	+52·1	+59·9	*+61·9*	+54·3	+43·6	+19·3	−7·3	−41·0	−44·7
Equinox	−76·7	*−84·6*	−71·5	−76·6	−55·3	−35·7	−23·0	−13·5	−5·1	+16·9	+26·5	+39·4	+42·5	+52·7	+62·8	+83·1	*+90·1*	+81·7	+57·7	+38·8	+2·9	−17·7	−61·3	−73·9
Summer	−37·3	−47·7	−38·4	−30·1	−23·9	−20·8	−14·1	−13·9	−8·6	−2·6	+0·3	+1·0	+4·8	+15·2	+27·6	+39·7	+52·3	*+54·4*	+53·3	+40·6	+23·1	−4·3	−22·3	*−48·3*

RANGE OF MEAN DIURNAL INEQUALITIES FOR THE MONTHS, YEAR AND SEASONS OF 1942

The ranges are derived from the diurnal inequalities printed in Tables 52 to 54

55 LERWICK 1942

	All days			Quiet days			Disturbed days		
	H	D	V	H	D	V	H	D	V
	γ	′	γ	γ	′	γ	γ	′	γ
Jan.	14.3	7.90	28.9	12.8	5.08	8.3	27.8	13.24	58.2
Feb.	43.0	8.25	45.3	15.3	4.90	5.1	206.1	17.48	152.4
Mar.	70.0	10.17	101.5	40.2	8.94	17.2	239.0	21.69	238.0
Apr.	86.3	13.83	84.0	60.0	11.10	16.2	242.3	26.92	182.4
May	58.1	11.79	33.5	53.4	11.50	20.4	86.2	17.36	90.9
June	64.3	13.29	46.6	48.1	11.43	12.2	109.4	18.42	103.7
July	64.1	11.08	60.4	56.0	12.15	18.6	119.1	18.62	118.8
Aug.	56.4	12.15	59.1	41.9	9.39	17.1	101.0	16.56	137.8
Sept.	48.4	10.22	83.7	40.8	11.63	33.6	89.6	14.74	167.8
Oct.	61.0	10.94	96.8	27.6	8.00	15.0	284.4	22.81	238.8
Nov.	24.7	9.19	59.8	12.5	5.56	31.5	87.0	16.14	154.6
Dec.	19.3	8.32	49.4	9.8	3.97	7.6	101.6	15.38	139.2
Year	42.8	8.69	58.0	32.6	7.97	9.8	101.6	13.22	124.4
Winter	20.1	8.73	41.8	10.9	4.24	8.2	75.1	14.65	108.6
Equinox	61.1	9.63	84.1	40.5	9.67	13.8	172.4	16.30	174.7
Summer	60.7	11.77	48.9	49.2	10.93	15.6	89.3	15.25	102.7

AVERAGE DEPARTURE

Arithmetical averages of diurnal inequalities in Tables 52 to 54 taken regardless of sign

56 LERWICK 1942

	All days			Quiet days			Disturbed days		
	H	D	V	H	D	V	H	D	V
	γ	′	γ	γ	′	γ	γ	′	γ
Jan.	3.4	1.96	8.6	3.0	1.27	1.5	7.2	3.02	15.9
Feb.	8.5	2.20	11.8	3.7	1.06	1.2	35.2	4.33	35.4
Mar.	16.7	2.35	24.8	9.9	1.99	3.5	52.4	3.11	59.4
Apr.	19.6	3.39	20.6	13.1	2.58	3.2	44.1	6.00	48.5
May	13.1	3.41	8.8	12.6	2.77	4.6	21.1	5.13	20.6
June	15.1	3.82	10.4	12.1	3.21	3.5	25.1	5.10	23.7
July	16.7	3.26	13.0	13.5	3.18	4.2	29.1	4.19	30.6
Aug.	13.8	3.18	13.8	10.1	2.38	4.2	25.0	4.31	35.3
Sept.	11.5	2.80	19.3	10.2	3.02	6.3	23.8	3.33	41.2
Oct.	13.5	2.26	24.3	6.9	2.23	2.6	50.3	4.93	54.5
Nov.	5.7	2.17	15.9	3.1	1.36	5.6	17.1	4.23	45.5
Dec.	4.9	1.85	12.8	2.7	0.83	1.7	13.7	4.03	34.8
Year	10.8	2.53	14.5	7.6	2.04	2.6	25.4	3.41	35.6
Winter	5.4	1.94	12.0	2.9	1.10	2.1	16.7	3.33	31.6
Equinox	14.6	2.62	22.1	9.9	2.35	3.3	39.8	3.65	49.6
Summer	14.5	3.35	11.0	12.0	2.86	3.7	24.5	4.58	26.0

NON-CYCLIC CHANGE

57 LERWICK 1942

	All days			Quiet days			Disturbed days		
	H	D	V	H	D	V	H	D	V
	γ	′	γ	γ	′	γ	γ	′	γ
Jan.	+0.3	−0.01	−0.3	+0.8	+0.58	−4.3	−3.3	−0.14	−22.5
Feb.	−1.2	+0.05	−0.6	+4.9	−0.16	−1.0	−17.9	+4.58	−17.0
Mar.	+1.2	−0.11	+0.7	+2.4	−1.37	−5.0	−29.4	−0.76	−15.3
Apr.	+0.1	−0.03	+0.1	+5.1	−0.56	+2.6	+38.7	+6.69	+12.3
May	−0.1	+0.05	−0.4	+4.8	+0.64	−2.0	−11.4	−1.65	−8.5
June	−0.1	−0.01	−0.9	+14.5	+0.27	−0.5	−13.3	−4.20	−29.7
July	0.0	+0.10	+0.6	+3.7	+0.03	−2.1	−30.9	+4.69	−35.1
Aug.	−0.2	−0.11	+0.3	+4.2	+0.26	+3.8	−5.5	−2.51	−22.0
Sept.	0.0	+0.02	+0.4	+3.0	+1.06	+0.3	−7.5	−0.33	−15.7
Oct.	−0.7	+0.01	−0.1	+6.2	−1.12	−3.4	−29.0	−2.73	−62.9
Nov.	+0.2	−0.05	0.0	−0.5	−0.88	+5.5	−14.9	−2.50	−19.1
Dec.	+0.4	−0.02	+0.5	+3.0	+0.43	−2.6	−4.5	+1.76	−13.4
Year	0.0	−0.01	0.0	+4.3	−0.07	−0.7	−10.7	+0.24	−20.7
Winter	−0.1	−0.01	−0.1	+2.1	−0.01	−0.6	−10.1	+0.93	−18.0
Equinox	+0.1	−0.03	+0.3	+4.2	−0.50	−1.4	−6.8	+0.72	−20.4
Summer	−0.1	+0.01	−0.1	+6.8	+0.30	−0.2	−15.3	−0.92	−23.8

"Winter" comprises the four months January, February, November, December; "Equinox" the months March, April, September, October; and "Summer" May to August.

MEAN MONTHLY AND ANNUAL VALUES OF TERRESTRIAL MAGNETIC ELEMENTS

For all, a, quiet, q, and disturbed, d, days for H, D and V and for all days for N, W, I and T

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	Horizontal force			Declination (west)			Vertical force			North component all days	West component all days	Inclination (north) all days	Total force all days
	a	q	d	a	q	d	a	q	d				
	14,000γ +			11° +			46,000γ +						
	γ	γ	γ	′	′	′	γ	γ	γ	γ	γ	° ′	γ
Jan.	383	387	375	56.7	56.6	56.8	895	894	898	14072	2977	72 56.9	49051
Feb.	385	386	385	55.8	56.2	55.5	894	892	902	14074	2974	72 56.8	49051
Mar.	374	383	361	55.0	55.1	53.8	894	896	896	14064	2968	72 57.5	49047
Apr.	375	381	361	54.0	53.7	54.3	895	898	888	14066	2964	72 57.5	49048
May	391	393	387	53.4	53.3	53.0	894	897	885	14082	2965	72 56.4	49052
June	396	398	401	53.4	53.6	53.4	892	894	890	14087	2966	72 56.0	49052
July	387	392	390	52.7	53.0	52.9	894	898	893	14079	2961	72 56.7	49051
Aug.	384	384	383	51.7	51.4	51.6	898	901	893	14077	2957	72 56.9	49054
Sept.	377	379	370	50.9	50.9	51.1	899	907	890	14071	2952	72 57.4	49053
Oct.	372	380	368	49.5	50.5	49.5	907	911	898	14067	2945	72 57.9	49059
Nov.	373	380	355	48.7	49.4	46.5	914	913	904	14068	2942	72 58.1	49066
Dec.	378	384	371	48.4	48.7	47.7	913	909	918	14074	2942	72 57.4	49067
Year	381	386	376	52.5	52.7	52.2	899	901	895	14073	2959	72 57.1	49054

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Night commencing				Night commencing				Night commencing			
			JANUARY				MARCH (contd.)				SEPTEMBER (contd.)
1	cb	••	Variable cloud. Full moon	9		⌓	Moderate aurora when cloud cleared at 22h.	19	cb	••	Mainly overcast. Moonlight
2	cb	••	Overcast apart from small gap before 19h.	10		⌓	Glow through breaks in cloud most of evening	20	cb	••	Overcast apart from small gap at 20h. Moonlight
4	b	⌓	Bright active coloured display from 21h., largely obscured by cloud	11	ca	••	Cloudy	22	cb	••	Cloudy. Bright moonlight
5		⌓	Variable cloud. Bright moon after 20h. Moderate quiet aurora from 19h.	21	c	••	Mainly overcast	23	b	••	Fine. Bright moonlight
				22	c	••	Mainly overcast	24	b	••	Fine. Bright moonlight
				24	cb	••	Cloudy, becoming fine. Moonlight	25	b	••	Fine. Bright moonlight
6	ca-a-b	••	Cloud clearing later. Bright moon after 21h.	25	cb	••	Very cloudy. Moonlight	26	b-cb	••	Cloud increasing. Moonlight and cirrus cloud
				26	cb	••	Mainly overcast. Moonlight and cirrus cloud	27	cb	••	Overcast apart from few breaks. Moonlight
7	a	⌓	Fine. Diffuse aurora most of evening	27	cb	••	Very cloudy. Bright moon	29	c-cb	••	Very cloudy. Moonlight later
8	ca	••	Cloud varying rapidly all evening								
9	a	⌓	Faint glow most of evening								
10		⌓	Faint glow until obscured by cloud at 21h.30m.				APRIL				OCTOBER
11	a	••	Fine								
12	c	••	Mainly overcast	1	cb	••	Overcast until 22h., then slight break. Moonlight	1	a-b	••	Fine. Moon after 21h.
14	a	⌓	Fine. Moderate quiet aurora from 20h.30m.	2	cb	••	Very cloudy. Moonlight	2		⌓	Variable cloud. Moderate display from 19h.45m. until 21h. and again at 04h.
18	c	••	Overcast apart from a break before 19h.	3		⌓	Very cloudy. Bright diffuse surface behind cloud after 22h.	4	a	⌓	Fine. Aurora from 19h.45m. Some activity at times
21	c	••	Mainly overcast	4		⌓	Moderate aurora, some activity. Obscured by cloud after 22h.	5	c	••	Very cloudy until 20h., then overcast
23	c	••	Mainly overcast								
25	c	••	Mainly overcast	8	c	••	Mainly overcast	8		⌓	Variable cloud. Diffuse surface all evening
26	cb	••	Very cloudy. Moonlight	10		⌓	Cloudy. Glow from 21h.30m.				
29	cb	••	Mainly overcast. Bright moon	11	c	••	Cloudy, becoming overcast 21h.				
31	cb	••	Cloudy. Bright moon	12	a	⌓	Faint glow most of evening	9	c	••	Overcast until 20h., then variable cloud
				13	c	••	Overcast apart from slight gap at 22h.	10	a	⌓	Mainly fine. Diffuse surface from 20h.55m.
				14	c	••	Very cloudy				
			FEBRUARY	15	b	⌓	Moderate glow all evening, masked by cirrus cloud and haze	11	a	⌓	Fine. Aurora from 19h.40m. Rayed arch at 19h.56m.
4		⌓	Extensive glow at 21h.40m.; largely obscured by cloud at 22h.	16	b	⌓	Moderate arch from 21h., blurred by haze	12		⌓	Cloudy. Diffuse surface at 20h.40m., obscured by cloud after 21h.20m.
7	c	••	Mainly overcast	17	b	⌓	Diffuse aurora from 21h. Fine apart from haze	13		⌓	Fine until 21h., then overcast with cirrus cloud. Quiet homogeneous arch at 20h.40m., masked by cloud at 21h.
8	a	⌓	Diffuse surface from 18h.45m. Mainly fine	18	b	⌓	Glow all evening, masked by haze				
9	c	••	Overcast until 21h., then clearing slightly	20	b	⌓	Moderate glow at 21h.30m. Moonlight	15		⌓	Variable cloud. Diffuse surface from 20h.5m.
10	a	⌓	Fairly extensive glow from 18h. 45m. Fine	22	cb	••	Mainly overcast. Moonlight				
12		⌓	Variable cloud. Diffuse surface all evening	23	b	⌓	Mainly overcast. Bright diffuse surface behind cloud at 22h.30m. Moonlight	16	b	⌓	Variable cloud. Quiet aurora from 20h. Moonlight
								17	cb	••	Very cloudy. Moonlight
13		⌓	Very cloudy. Diffuse surface from 21h.30m.	24	b	••	Fine. Moonlight	20	b	⌓	Cloudy. Moderate glow 19h.45m. until 20h.20m. Moonlight
				25	b	••	Fine. Moonlight				
15		⌓	Overcast until 21h., then fine. Glow at 21h.20m., becoming inactive rayed arch at 22h.30m.	26	cb	••	Very cloudy. Moonlight	21	cb	••	Cloudy. Bright moonlight
				27	b	••	Fine. Bright moonlight	22	cb	••	Cloudy. Bright moonlight
				28	b	••	Fine. Bright moonlight	23	cb	••	Mainly overcast. Bright moon
16	a	⌓	Moderate aurora from 20h.30m., rays at times. Fine	29	b	••	Fine. Bright moonlight	24	cb	••	Cloudy. Bright moon
				30	cb	••	Mainly overcast. Bright moon	25	cb	••	Cloudy. Bright moon
17	c	••	Cloudy, becoming overcast 21h.					26	cb	••	Very cloudy. Moonlight
18	c	••	Mainly overcast					27	cb	••	Very cloudy. Moonlight
19	b	••	Cloudy. Bank of cloud along N horizon all evening					28	b	⌓	Aurora all evening. Brilliant coloured display 20h.20m. to 20h.45m. Moonlight after 20h.30m.
							SEPTEMBER				
21	c	••	Mainly overcast								
22	b	••	Fine. Bright moonlight	1		⌓	Cloudy. Diffuse surface at 22h.15m.	29		⌓	Mainly overcast. Moderate diffuse aurora seen through breaks in cloud all evening
23	cb	••	Mainly overcast. Bright moonlight	2		⌓	Very cloudy. Moderate aurora from 21h.15m., mainly obscured by cloud				
24	cb-b	••	Overcast, clearing after 20h. Bright moonlight and cirrus cloud					30	a	⌓	Aurora most of evening. Considerable activity from 17h.55m. until 18h.20m. Fine
25	cb	••	Mainly overcast. Bright moon	3	ca-a	••	Very cloudy, clearing later				
28	cb	••	Overcast until 20h., then cloudy Bright moon	4	a	••	Mainly fine				
				5	a	⌓	Fine. Faint glow from 21h.15m.	31		⌓	Variable cloud. Moderate aurora from 20h.50m. Largely concealed by cloud
				6	a	⌓	Fine. Faint glow at 21h.15m., becoming moderate homogeneous arch at 21h.45m.				
			MARCH	7		⌓	Overcast until 22h., then clearing. Glow first seen at 22h.15m.; very bright by 23h.5m.				
1	b	⌓	Fine. Bright active aurora 19h. 45m. until 21h.15m. Bright moonlight								NOVEMBER
				9	c	••	Very cloudy				
				11	a	⌓	Fine. Bright active display 22h. 5m. until 22h.20m. Red colouration at times	1	a	••	Mainly fine
3	cb-b	••	Very cloudy, clearing after 19h. Bright moon					2		⌓	Quiet aurora until obscured by cloud at 20h.30m.
4	cb	••	Variable cloud. Bright moon	12	a	⌓	Fine. Some rays at 20h.30m., becoming diffuse at 21h.	4	cb	••	Variable cloud. Very misty
5		⌓	Cloudy. Moderate active aurora from 19h.30m.	13		⌓	Extensive diffuse surface all evening, largely obscured by cloud	5		⌓	Overcast until 20h., then very cloudy. Diffuse surface from 20h. until 21h.30m.
6		⌓	Cloudy. Glow most of evening, arch at times					7	a	⌓	Quiet homogeneous arch all evening
8	c	••	Overcast, apart from slight gap at 20h.	14		⌓	Overcast until 22h. Diffuse surface at 2h.30m.	8	c	••	Overcast apart from some clear periods before 19h.

59 LERWICK (contd.) 1942

Night commencing				Night commencing				Night commencing			
			NOVEMBER (contd.)				NOVEMBER (contd.)				DECEMBER (contd.)
10	a	⌓	Fine. Aurora all evening. Some coloured activity at 20h.47m.	29	b	⌓	Variable cloud. Diffuse surface from 17h.30m. Moonlight later	12	b-a	⌓	Mainly fine. Moon in early evening. Diffuse surface from 20h.45m.
11	cb	··	Cloudy, becoming mainly overcast at 21h.	30		··	Overcast until 22h. Diffuse surface seen when cloud cleared at 24h.15m.	13	b	⌓	Overcast until 21h., then clearing slightly. Diffuse surface through gaps in cloud, probably present all evening. Moonlight
12		⌓	Variable cloud. Diffuse surface from 20h.15m.								
15	cb	··	Variable cloud. Moonlight								
16	cb-b	··	Cloudy, becoming fine at 20h. Moon light				DECEMBER	14	b	⌓	Mainly fine. Bright moonlight. Diffuse surface most of evening. Arch and rays at times
18	cb	··	Cloudy. Moonlight								
19	cb	··	Variable cloud. Bright moon					20	cb	··	Full moon, Very cloudy
20	cb	··	Variable cloud. Bright moon	1	cb	··	Overcast until 21h., then clearing. Cirrus cloud	21	cb	··	Cloudy, overcast after 21h. Bright moon
22	cb	··	Variable cloud. Bright moon								
23	b	⌓	Mainly overcast. Aurora behind cloud. Bright moon	2	c	··	Variable cloud	22	cb-b	··	Cloudy until 19h., then fine. Bright moon
24	b	⌓	Mainly overcast. Aurora behind cloud Bright moon	5		⌓	Cloudy, becoming overcast 21h. Homogeneous arch from 20h. until 20h.45m.	23	cb	··	Very cloudy. Bright moon
								24	cb	··	Variable cloud. Bright moon
26	cb	··	Cloudy until 19h., then overcast Bright moon	8		⌓	Cloud, overcast after 21h. Moderate aurora with occasional activity all evening	25	cb	··	Variable cloud. Bright moon
								26	cb	··	Overcast, apart from small break after 21h. Moonlight
27	b	⌓	Very cloudy. Diffuse surface at 19h. behind clouds. Homogeneous arch at 20h.45m. Moonlight	9		⌓	Cloudy, becoming overcast 21h. Aurora from 17h. Some bright coloured activity at 19h.	27	cb	··	Very cloudy. Moon later
								28	ca-cb	··	Variable cloud. Moon later
28	b	⌓	Variable cloud. Aurora from 17h.45m. Some activity, obscured by cloud. Moon rising later					29	ca	··	Cloud varying rapidly
				11		⌓	Variable cloud. Faint glow all evening	31		⌓	Cloudy. Diffuse surface through breaks in cloud from 21h.30m.

In the interests of brevity there have been omitted from Table 59 all dates on which the sky throughout the evening remained completely overcast and on which, therefore, no opportunity arose of determining whether or not aurora occurred. The nights on which aurora was actually seen are indicated by the symbol ⌓. The nights on which aurora was not seen, despite at least an occasional interval of more or less clear sky, are indicated by the symbol ··; in the latter case also, remarks on the weather are added to assist the reader in judging how far the fact of no observation of aurora may be taken as indicating that there was not actual aurora.

The letters a, b, c, have the following significance:–

a = Conditions favourable for seeing aurora
b = Unfavourable for faint aurora (moonlight, mist, Cs, etc.) but not such as to mask bright aurora
c = Cloudy, but aurora not seen in clear intervals
ca, cb = Have been used for "Cloudy, with conditions a or b in the intervals"
Changing conditions have been indicated by a hyphen, e.g., a-c

60 OTHER SCOTTISH STATIONS 1942

Night commencing		Night commencing		Night commencing	
	JANUARY		APRIL (contd.)		SEPTEMBER (contd.)
4	Sumburgh	17	Cape Wrath; Invergordon; Montrose; Nairn; Noup Head 1h.-4h.30m.(18th); Rona, midt.-3h.(18th); Rudh Re 23h.-3h.(18th); St. Abbs Head 3h.(18th); Stour Head 1h.-3h.30m.(18th); Sumburgh; Tiumpan Head 3h.30m.-5h.45m.(18th); Wick	12	Benbecula; Noup Head 22h.-24h.; Sumburgh
5	Arbroath; K.; Wick			13	Cape Wrath; Sumburgh
9	Wick			15	Sumburgh
11	Wick			18	K.; Nairn
14	Wick				
18	Nairn				
		18	Invergordon; Montrose; Perth; St. Abbs Head		OCTOBER
	FEBRUARY	19	Montrose	2	B.; Benbecula; Duntuilm; K.; Nairn; Neist Point 19h.40m.-20h.30m.; Sumburgh
		23	Wick		
3	Duntuilm	24	Rona 00h.30m.-1h.30m.(25th); Tiumpan Head 3h.45m.-4h.30m.(25th); Wick	3	Sumburgh
6	Kettins; K.; McArthur's Head, 23h.45m.; Montrose; Lochmaddy	27	Wick	4	Duntuilm; Nairn
7	Montrose	28	McArthur's Head 1h.30m.(29th); Noup Head 1h.-2h.30m.(29th); Wick	5	B.; Nairn; Perth; Tiumpan Head 20h.30m.-21h.
15	B.; K.; Leuchars; Montrose	29	Abbotsinch; Wick	7	Benbecula
16	B.; Leuchars; Wick			8	B.
22	G.C.			10	Benbecula
23	Edinburgh; E.; K.; McArthur's Head 1h.15m.(24th); Noup Head 20h.30m.-23h. St. Abbs Head; Ushenish 19h.50m.-21h.6m.; Wick		MAY	11	B.; E.; Sumburgh
				12	Nairn; Sumburgh
				15	Benbecula; G.C.
		6	Abbotsinch	16	K.
25	A.	11	Leuchars	20	Benbecula
		15	Invergordon	28	B.; Benbecula; Fort Augustus; Fort William; K.; Linlithgow; Lochailort; Nairn; Stranraer; Sumburgh
			JUNE		
	MARCH			29	Benbecula; Greenock; Nairn; Perth; Sumburgh
			Nil	30	A.; Benbecula; Sumburgh
1	B.; Fort Augustus; Nairn			31	Benbecula; Nairn; Perth
5	B.; Rona, 19h.30m.-22h.				
6	B.				
7	Montrose; Nairn		JULY		
8	Abbotsinch; Devaar 19h.45m.-24h. E. Stornoway				NOVEMBER
9	Abbotsinch; Buddonness; E.; Kettins; McArthur's Head 1h.30m.-3h.(10th); Nairn; Rona 21h.-23h.; St. Abbs Head; Stornoway		Nil	2	Benbecula; Nairn
				3	Leuchars
				7	Sumburgh
			AUGUST	8	E.
10	McArthur's Head, 23h.30m.			10	Abbotsinch; Benbecula; Duntuilm; Nairn; Sumburgh
22	Kettins; Rona 1h.-3h.(23rd)	14	Duntuilm		
28	B.	16	Abbotsinch; Perth	11	Abbotsinch; Leuchars; McArthur's Head, bright display 1h.(12th); Tiree, faint
				14	Leuchars
				24	Montrose
	APRIL		SEPTEMBER		
					DECEMBER
8	Wick	2	B.; Sumburgh		
10	Wick	6	Sumburgh		
11	Montrose; St. Abbs Head; Wick	7	Invergordon	3	Nairn
14	Invergordon; Noup Head 2h.-4h.(15th); Rona, midt.-3h.30m.(15th); Rudh Re 2h.-4h.(15th); Stranraer	10	Buddonness	7	A.; Buddonness; Nairn
		11	B.; Duntuilm; G.C.; Invergordon McArthur's Head 21h.; Nairn; Noup Head 21h.30m.-23h.; Perth; Rhudh Re 22h.30m.-23h.30m.; Sumburgh	9	A.; Benbecula; Carluke; Edinburgh; Fortrose; Nairn; Sumburgh
16	Duntuilm; McArthur's Head 23h.-2h.30m.(17th)			11	Noup Head 22h.-1h.30m.(12th)
				12	Sumburgh

For brevity, stations which figure frequently in the above table are represented by their initials, namely A - Aberdeen, B - Baltasound, D - Deerness, E - Eskdalemuir, G.C. - Gordon Castle, K - Kirkwall.

ABERDEEN

ABERDEEN OBSERVATORY

Latitude	57°10′ N.
Longitude	2°06′ W.
G.M.T. of Local Mean Noon	12h. 8m.

Heights of instruments	above M.S.L.	above ground
	m.	m.
Barometer	26·0	..
Thermometer bulbs, north-wall screen	..	12·5
Rain-gauge site	24·1	..
Beckley rain-gauge rim	..	0·6
Sunshine recorder	..	20·7
Pressure-tube anemograph	37	13
Robinson cup anemograph	36	23

INTRODUCTION

A description of the site and instruments is given in the *Observatories' Year Book* for 1938, and no noteworthy changes have occurred.

REVIEW OF THE METEOROLOGICAL RESULTS

The outstanding features of the year were the excessive precipitation of January and the period of drought in April and May.

The mean temperature for the year was 281·0°A. only 0·1° less than the normal. The extremes recorded in the north-wall screen were 298·2°A. on June 6 and 268·1°A. on February 25. The lowest reading of the grass minimum thermometer was 264·7°A. on March 8.

The total rainfall for the year was 684 mm.; 64 mm. less than the normal. Rainfall in January was 115 mm.

The sunshine total 1285 hr. was a little less than normal.

The highest wind speed recorded in a gust was 30 m./sec. on December 29.

The results of the harmonic analysis of the diurnal inequalities of pressure are set out in the accompanying table. Average values of the various coefficients for the period 1871-1926 computed by Dr. A. Crichton Mitchell* are given for comparison. Dr. Mitchell gave the phase angles in local apparent time and in volumes of the *Observatories' Year Book* earlier than 1935 they were so quoted; the angles have now been converted to local mean time.

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* MITCHELL, A. CRICHTON: Diurnal variation of pressure and temperature at Aberdeen 1871-1926. *Quart. J.R. met. Soc., London*, **55**, 1929, p. 197.

ABERDEEN OBSERVATORY

HARMONIC COMPONENTS OF THE DIURNAL INEQUALITY OF ATMOSPHERIC PRESSURE
ABERDEEN, LONGITUDE 2°06′W.

Values of c_n, α_n in the series $\Sigma c_n \sin(15nt + \alpha_n)$, t being local time reckoned in hours from midnight

	c_1		α_1		c_2		α_2		c_3		α_3		c_4		α_4	
	1942	1871-1926	1942	1871-1926	1942	1871-1926	1942	1871-1926	1942	1871-1926	1942	1871-1926	1942	1871-1926	1942	1871-1926
	mb.	mb.	°	°	mb.	mb.	°	°	mb.	mb.	°	°	mb.	mb.	°	°
January	0.52	0.09	342	169	0.22	0.23	138	146	0.11	0.13	355	348	0.06	0.05	205	211
February	0.18	0.16	228	173	0.25	0.27	147	143	0.10	0.10	350	346	0.01	0.03	284	84
March	0.08	0.16	131	156	0.32	0.29	135	147	0.04	0.05	340	330	0.05	0.03	25	27
April	0.22	0.15	304	155	0.26	0.28	140	151	0.02	0.02	177	188	0.04	0.04	345	359
May	0.27	0.10	159	136	0.20	0.24	150	145	0.08	0.06	175	166	0.02	0.02	307	333
June	0.17	0.06	89	104	0.18	0.22	153	141	0.05	0.07	151	155	0.02	0.01	316	331
July	0.04	0.09	223	135	0.24	0.21	144	142	0.06	0.07	120	155	0.02	0.01	66	339
August	0.10	0.11	41	161	0.25	0.23	148	144	0.03	0.04	125	165	0.05	0.03	321	333
September	0.39	0.12	186	147	0.37	0.29	153	151	0.04	0.03	44	346	0.07	0.05	8	345
October	0.32	0.15	167	187	0.23	0.27	147	156	0.06	0.07	356	0	0.05	0.03	33	34
November	0.28	0.13	301	201	0.25	0.23	137	159	0.11	0.10	17	4	0.01	0.01	60	186
December	0.57	0.16	265	169	0.25	0.21	179	147	0.08	0.12	347	357	0.05	0.05	163	205
Arithmetic mean	0.26				0.25				0.07				0.04			
Year	0.08	0.12	247	162	0.25	0.25	147	148	0.03	0.03	17	359	0.01	0.01	356	338
Winter	0.30	0.13	293	178	0.23	0.23	151	149	0.10	0.11	357	353	0.02	0.03	184	194
Equinox	0.16	0.14	188	162	0.29	0.28	144	151	0.02	0.03	6	345	0.05	0.04	11	6
Summer	0.09	0.09	123	139	0.22	0.22	148	143	0.05	0.06	149	159	0.02	0.02	328	334

"Winter" comprises the four months January, February, November, December; "Equinox" the months March, April, September, October; and "Summer" May to August.

PRESSURE AT STATION LEVEL

Maximum, minimum and daily mean values in millibars for each day 0h. to 24h., G.M.T.
The initial 9 or 10 of the values is omitted, i.e. 1005.61 is printed 05.61

61 ABERDEEN: h_b (height of barometer cistern above M.S.L.) = 26.0 m. 1942

	JANUARY			FEBRUARY			MARCH			APRIL			MAY			JUNE		
	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean
	millibars																	
1	23.6	15.5	18.9	11.2	07.3	09.2	18.9	08.2	15.2	93.3	88.2	90.4	*26.1*	19.6	22.2	18.6	10.7	14.4
2	21.8	12.2	19.0	17.6	08.3	14.5	18.7	15.3	16.9	11.8	93.3	06.2	19.6	18.0	18.8	20.9	12.2	17.6
3	12.2	99.3	04.8	12.2	01.5	05.4	15.3	10.6	13.5	11.5	99.3	06.2	23.1	17.8	20.2	23.7	20.1	21.8
4	13.5	98.5	06.6	25.5	09.1	18.8	15.1	07.7	10.0	99.3	87.7	94.9	23.2	17.6	21.8	*27.8*	21.8	24.4
5	21.0	13.5	17.8	26.5	20.6	24.9	21.1	15.1	19.1	87.7	*78.9*	*81.1*	17.6	10.5	14.6	27.4	19.7	*24.6*
6	21.0	19.6	20.2	20.6	16.1	17.6	20.4	14.2	17.9	86.0	81.4	84.2	10.5	02.4	05.3	19.7	10.5	13.4
7	22.7	19.2	20.9	22.5	18.2	21.1	14.2	07.9	10.2	83.2	80.3	81.4	19.6	04.4	14.6	12.0	07.2	09.5
8	22.4	11.6	16.7	22.1	18.0	20.2	07.9	94.0	00.5	95.6	83.0	88.8	19.8	18.6	19.2	11.3	08.0	09.4
9	20.5	10.7	14.4	21.1	06.8	16.2	12.8	99.7	07.5	96.5	85.9	91.7	20.2	18.8	19.5	15.8	10.1	12.9
10	*24.1*	20.5	*22.8*	12.1	04.5	08.4	14.6	12.5	13.5	15.7	87.2	01.2	19.4	14.2	17.4	16.9	14.9	16.0
11	21.8	14.8	18.2	12.2	99.4	06.6	14.0	12.2	13.2	18.4	15.7	17.3	14.2	07.2	10.3	16.4	11.5	13.2
12	15.9	92.3	05.6	99.9	93.6	*96.3*	13.9	07.0	10.7	16.9	15.0	16.0	08.3	06.4	07.4	11.5	08.1	09.7
13	92.3	88.4	89.5	20.4	99.9	10.0	07.0	98.9	02.8	23.3	15.1	18.3	12.6	07.7	10.0	10.8	08.6	09.9
14	13.1	91.4	02.4	28.2	20.4	25.3	99.0	96.7	97.7	30.7	23.3	27.1	14.9	12.5	13.7	10.4	08.4	09.5
15	15.7	10.7	13.9	34.3	27.3	30.3	01.6	97.7	99.3	31.4	27.6	29.8	14.5	08.6	12.1	11.2	08.1	09.5
16	15.6	08.6	11.5	41.2	34.3	38.2	03.9	96.7	01.5	27.6	23.1	25.2	08.6	05.6	06.6	11.3	06.3	09.1
17	17.5	12.8	15.5	*42.4*	39.9	*41.2*	96.7	92.0	93.8	23.8	17.9	21.6	08.9	06.6	08.2	06.8	*00.9*	*03.4*
18	18.5	12.5	14.9	39.9	37.7	38.8	04.5	94.6	98.5	17.9	07.6	12.5	06.6	96.7	00.7	19.0	05.5	13.0
19	18.7	10.8	15.7	37.7	29.3	34.0	12.2	04.5	08.7	07.6	02.4	04.3	12.8	04.1	08.4	21.5	18.9	20.6
20	17.3	10.7	13.4	29.3	24.5	26.2	14.5	11.9	12.8	08.9	04.5	06.0	13.6	11.6	12.7	21.9	18.6	20.6
21	20.7	17.3	19.2	24.5	13.6	19.3	25.1	14.5	19.7	10.3	08.0	09.2	11.9	09.3	10.6	20.7	13.9	16.4
22	19.9	09.2	15.9	13.6	06.1	09.6	28.6	25.1	26.9	16.2	08.6	11.4	09.3	07.8	08.4	13.9	10.4	11.9
23	09.2	94.9	00.8	06.1	02.1	03.4	*28.7*	25.2	*27.6*	26.5	16.2	22.3	09.0	95.3	03.7	15.2	10.2	11.8
24	99.6	82.5	92.8	07.8	02.7	05.0	25.2	14.2	19.3	28.2	26.5	27.4	00.1	92.2	96.6	23.1	15.2	18.7
25	96.2	*80.8*	*83.9*	12.6	07.8	10.5	18.8	14.0	15.9	27.9	25.3	26.8	98.8	89.9	92.7	25.4	23.1	24.2
26	10.5	96.2	06.9	13.4	10.7	12.3	19.0	15.8	18.1	25.3	23.9	24.4	93.0	86.8	91.1	23.3	18.1	19.8
27	07.1	84.7	93.5	10.7	93.1	02.1	19.3	12.9	15.5	28.1	24.3	25.6	86.9	80.9	85.5	18.7	09.0	15.0
28	89.8	86.3	87.2	08.2	*92.6*	97.9	20.8	16.0	18.9	31.7	28.1	30.4	93.9	*77.8*	*83.6*	13.4	08.8	11.5
29	07.2	89.8	02.1				16.0	08.1	11.6	*32.8*	30.6	*31.7*	01.8	93.9	97.4	20.4	12.7	17.4
30	07.2	96.9	01.8				08.1	02.7	05.2	30.6	26.1	28.5	08.9	01.8	05.7	20.1	16.3	18.0
31	13.2	03.6	10.7				02.7	*86.8*	*92.5*				18.6	08.3	13.1			
Mean	13.86	03.74	08.95	20.49	12.34	16.55	14.15	07.51	10.78	14.82	07.83	11.39	11.17	04.93	08.13	17.64	12.28	14.92

	JULY			AUGUST			SEPTEMBER			OCTOBER			NOVEMBER			DECEMBER		
	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean
	millibars																	
1	17.5	16.4	17.0	12.7	08.1	10.8	00.7	98.6	99.7	16.8	05.9	09.0	07.5	03.4	05.5	03.9	97.3	99.7
2	16.4	09.6	12.8	10.2	06.8	08.0	04.2	90.2	01.7	20.6	16.8	*19.3*	10.3	07.0	08.6	13.4	03.9	09.4
3	09.6	01.6	06.1	14.6	10.1	12.3	02.5	92.6	95.8	*21.0*	07.2	17.2	13.0	11.0	11.5	14.6	12.2	13.6
4	01.9	98.4	01.7	18.6	14.3	16.4	04.0	97.0	01.5	07.6	01.8	05.2	12.7	06.9	10.2	12.2	92.9	06.4
5	02.1	99.9	01.1	*18.8*	17.2	*17.9*	00.5	89.8	94.6	12.5	97.7	03.8	06.9	02.7	04.8	99.7	82.6	88.1
6	00.6	96.7	98.5	18.0	15.3	17.2	14.5	00.5	07.7	19.2	12.5	16.3	03.0	*85.8*	95.9	06.6	96.9	02.5
7	02.5	99.3	00.5	15.3	07.1	10.9	14.6	09.1	12.3	12.9	99.9	05.8	01.0	88.0	*94.9*	97.5	87.3	94.1
8	06.0	02.5	04.2	07.1	94.5	99.3	12.7	09.4	11.2	99.9	96.8	98.1	15.7	01.0	10.1	07.9	88.4	03.0
9	10.1	06.0	08.0	05.0	98.7	02.7	22.8	09.7	17.4	01.4	84.3	93.6	16.6	14.3	15.4	02.5	90.3	98.3
10	09.9	08.2	09.0	04.7	88.5	96.1	22.7	13.8	18.5	00.5	84.6	90.8	24.6	12.5	16.8	99.2	82.9	91.5
11	12.8	08.1	09.9	93.1	*87.8*	*90.1*	22.4	13.8	17.8	14.8	00.5	09.7	25.5	13.4	21.3	94.2	*81.0*	*87.1*
12	14.5	11.4	13.5	02.4	93.2	97.0	*27.4*	22.4	*25.1*	13.7	07.4	10.4	26.8	10.0	18.2	03.8	94.2	00.3
13	11.4	07.8	09.3	08.6	02.4	05.5	*27.4*	20.9	24.8	15.5	11.2	14.1	29.3	26.8	28.2	01.9	86.9	91.2
14	13.6	09.6	10.7	10.1	08.4	09.3	20.9	02.9	12.5	11.2	93.5	01.0	27.5	24.0	26.0	97.8	90.5	95.4
15	15.1	06.5	12.6	09.8	00.8	05.1	07.2	99.0	03.6	02.8	92.4	97.9	26.0	19.8	22.2	97.2	91.5	93.7
16	06.5	02.9	03.9	12.0	03.3	09.3	09.6	05.2	07.6	11.0	02.8	07.5	31.8	25.7	29.4	93.1	87.2	89.9
17	12.5	04.4	09.5	07.3	05.0	05.7	12.1	07.6	10.1	11.0	07.4	09.8	31.4	25.3	28.8	88.5	87.0	87.8
18	17.8	12.5	16.4	07.5	02.1	05.8	11.2	03.3	06.0	13.2	07.1	10.3	25.4	23.1	24.7	98.9	88.1	94.4
19	17.6	13.4	14.8	02.1	99.0	00.4	10.7	01.6	06.8	11.8	08.8	09.8	25.1	17.3	21.4	99.4	91.8	95.4
20	14.3	10.6	12.3	02.3	00.0	00.7	10.3	91.7	03.5	09.6	04.8	06.8	24.7	18.2	21.0	04.6	94.7	01.6
21	14.0	04.4	10.1	04.2	97.8	02.0	92.5	86.8	89.8	08.8	02.6	07.0	30.9	24.7	27.8	02.9	89.1	97.1
22	04.4	89.2	*97.4*	09.6	97.9	01.4	92.2	83.3	86.9	02.6	96.2	98.2	31.0	26.6	28.4	20.0	94.2	03.6
23	07.5	*88.7*	00.7	16.2	09.6	14.2	85.3	*80.4*	*81.7*	00.3	94.2	98.0	31.3	26.1	28.5	20.6	15.6	18.4
24	06.8	93.7	98.6	15.6	08.7	11.9	98.3	85.3	93.7	94.2	86.6	88.8	35.4	31.3	33.5	21.0	11.5	15.5
25	03.8	94.1	98.7	09.0	07.1	08.0	07.9	97.1	02.7	92.7	88.4	91.7	*36.4*	35.0	*35.7*	20.9	17.5	19.2
26	08.4	03.8	06.2	14.8	08.5	11.5	09.6	07.2	08.3	88.4	79.4	*82.2*	35.2	29.4	31.6	20.9	15.2	18.2
27	13.4	07.3	09.1	16.0	13.6	14.9	07.4	01.9	05.6	96.0	*77.7*	85.2	29.6	18.4	24.4	*23.4*	13.7	*20.4*
28	15.2	09.4	13.2	14.1	09.4	11.8	01.9	92.6	97.9	06.2	96.0	02.5	21.2	05.9	15.8	13.7	94.3	02.4
29	17.1	07.2	10.9	17.7	13.5	16.1	05.2	91.9	97.8	05.8	01.2	03.7	12.3	06.7	09.5	19.0	94.9	08.6
30	*20.2*	17.1	*19.2*	17.4	08.7	14.2	07.6	04.5	06.1	05.9	01.0	03.6	12.3	97.8	06.4	20.9	95.0	12.8
31	18.7	12.5	15.1	08.7	00.0	03.0				05.4	02.6	03.8				03.1	94.8	99.4
Mean	11.04	04.94	08.06	10.44	04.43	07.41	08.88	00.34	04.96	07.53	99.01	03.26	22.01	14.57	18.55	07.20	95.59	01.90
									Annual	13.18	05.54	09.57						

PRESSURE AT STATION LEVEL

Monthly and annual means of hourly values in millibars at exact hours, G.M.T.

62 ABERDEEN: h_b = 26 m. 1942

	Hour G.M.T. 0	1	2	3	4	5	6	7	8	9	10	11	Noon	13	14	15	16	17	18	19	20	21	22	23	24	Mean
	millibars																									
Jan.	09·16	09·10	09·22	09·29	09·29	09·25	09·25	09·33	09·54	09·68	*09·76*	09·64	09·30	08·88	08·65	08·48	08·37	*08·28*	08·32	08·30	08·36	08·42	08·52	08·63	08·76	08·95
Feb.	16·60	16·54	16·43	16·29	16·20	*16·16*	16·20	16·35	16·64	16·79	16·95	*17·01*	16·84	16·63	16·54	16·48	16·43	16·44	16·61	16·66	16·69	16·66	16·62	16·51	16·49	16·55
Mar.	*11·39*	11·29	11·12	10·83	10·61	10·62	10·61	10·75	10·90	10·97	11·03	11·10	10·96	10·84	10·63	10·45	10·33	*10·32*	10·46	10·69	10·74	10·80	10·83	10·83	10·75	10·78
Apr.	10·74	10·74	10·70	*10·67*	10·70	10·81	11·02	11·27	11·48	11·61	11·74	11·75	11·70	11·71	11·57	11·44	11·31	11·31	11·36	11·51	11·75	11·86	11·95	11·99	*12·01*	11·39
May	08·46	08·27	08·05	07·91	*07·82*	*07·82*	07·93	07·99	08·02	08·01	08·07	08·10	08·09	08·14	08·15	08·12	08·07	08·07	08·09	08·23	08·40	*08·54*	08·51	08·41	08·22	08·13
June	15·20	15·11	15·02	14·87	14·81	14·80	14·89	14·93	14·98	14·98	14·93	14·82	14·82	14·78	14·71	14·69	*14·66*	14·66	14·80	14·87	15·02	15·23	*15·29*	15·21	15·16	14·92
July	*08·31*	08·18	08·01	07·79	*07·76*	07·85	07·93	08·11	08·18	08·27	08·28	08·24	08·18	08·15	08·00	07·93	07·89	07·86	07·88	07·93	08·05	08·16	08·24	08·24	08·16	08·06
Aug.	*07·82*	07·72	07·61	07·46	07·37	07·35	07·43	07·56	07·68	07·72	07·63	07·59	07·44	07·31	07·25	07·16	07·02	*06·95*	07·01	07·24	07·36	07·50	07·48	07·49	07·41	07·41
Sept.	05·01	04·81	04·53	04·29	*04·06*	04·06	04·30	04·57	04·83	05·09	05·10	05·14	05·14	05·12	05·06	05·01	04·96	05·03	05·21	05·49	*05·61*	05·57	05·49	05·44	05·25	04·96
Oct.	03·56	03·44	03·19	02·99	02·84	*02·74*	02·76	02·95	03·08	03·17	03·28	03·35	03·34	03·25	03·27	03·16	03·15	03·26	03·51	*03·64*	03·63	03·60	03·55	03·51	03·44	03·26
Nov.	18·62	18·57	18·57	18·41	18·34	18·36	18·42	18·68	18·92	19·05	19·15	*19·20*	18·88	18·76	18·55	18·36	18·31	*18·24*	18·34	18·33	18·26	18·28	18·29	18·40	18·43	18·55
Dec.	01·35	01·18	*01·17*	01·35	01·28	01·54	01·73	02·06	02·24	02·40	*02·74*	*02·74*	02·50	02·28	02·14	02·01	02·03	02·05	02·08	02·00	01·84	01·77	01·69	01·49	01·40	01·90
Annual	09·69	09·58	09·47	09·35	*09·26*	09·28	09·37	09·55	09·71	09·81	09·89	*09·89*	09·77	09·65	09·54	09·44	09·38	09·37	09·47	09·57	09·64	09·70	09·71	09·68	09·62	09·57

The initial 9 or 10 of the value is omitted, i.e. 1001·42 is printed 01·42.

PRESSURE REDUCED TO MEAN SEA LEVEL

Monthly and annual means of hourly values in millibars at exact hours, G.M.T.

63 ABERDEEN: h_b = 26 m. 1942

	Hour G.M.T. 0	1	2	3	4	5	6	7	8	9	10	11	Noon	13	14	15	16	17	18	19	20	21	22	23	24	Mean
	millibars																									
Jan.	12·43	12·37	12·48	12·56	12·56	12·52	12·53	12·60	12·81	12·95	*13·03*	12·91	12·56	12·14	11·91	11·74	11·64	*11·54*	11·58	11·56	11·63	11·69	11·78	11·90	12·03	12·22
Feb.	19·91	19·84	19·73	19·59	19·51	*19·47*	19·50	19·65	19·95	20·09	20·25	*20·31*	20·13	19·92	19·82	19·77	19·72	19·73	19·91	19·95	19·99	19·96	19·92	19·82	19·80	19·85
Mar.	*14·64*	14·56	14·38	14·10	13·88	13·89	13·88	14·02	14·16	14·23	14·28	14·35	14·20	14·09	13·87	13·69	13·57	*13·56*	13·71	13·94	13·99	14·05	14·09	14·09	14·00	14·04
Apr.	13·98	13·98	13·93	*13·91*	13·94	14·05	14·26	14·50	14·70	14·82	14·95	14·95	14·91	14·91	14·77	14·64	14·51	14·52	14·51	14·72	14·98	15·09	15·18	15·22	*15·25*	14·61
May	11·66	11·47	11·26	11·12	11·03	*11·03*	11·13	11·18	11·20	11·18	11·24	11·26	11·25	11·30	11·31	11·29	11·24	11·24	11·26	11·41	11·58	*11·73*	11·71	11·61	11·42	11·31
June	18·39	18·30	18·21	18·07	18·01	17·99	18·07	18·11	18·15	18·14	18·09	17·97	17·98	17·93	17·87	17·84	*17·81*	17·82	17·96	18·04	18·19	18·41	*18·48*	18·39	18·35	18·09
July	*11·46*	11·33	11·16	10·95	*10·91*	11·00	11·07	11·25	11·31	11·39	11·39	11·36	11·29	11·25	11·11	11·03	11·00	10·97	10·99	11·05	11·18	11·30	11·37	11·39	11·31	11·19
Aug.	*10·96*	10·86	10·75	10·61	10·51	10·49	10·57	10·70	10·81	10·84	10·75	10·70	10·55	10·42	10·35	10·27	10·12	*10·06*	10·13	10·35	10·48	10·62	10·61	10·62	10·55	10·54
Sept.	08·17	07·97	07·69	07·45	*07·22*	07·22	07·46	07·73	07·98	08·22	08·23	08·27	08·27	08·24	08·18	08·13	08·08	08·16	08·34	08·63	*08·76*	08·72	08·64	08·59	08·41	08·10
Oct.	06·74	06·61	06·37	06·17	06·02	*05·92*	05·94	06·13	06·25	06·34	06·44	06·50	06·49	06·40	06·42	06·31	06·31	06·42	06·67	*06·81*	06·81	06·77	06·72	06·69	06·62	06·43
Nov.	21·88	21·83	21·83	21·67	21·61	21·63	21·68	21·94	22·19	22·31	22·41	*22·45*	22·12	21·99	21·78	21·60	21·55	*21·49*	21·59	21·59	21·51	21·54	21·55	21·66	21·69	21·81
Dec.	04·54	04·38	*04·37*	04·54	04·48	04·74	04·93	05·27	05·44	05·61	*05·95*	05·94	05·69	05·47	05·33	05·20	05·22	05·25	05·27	05·20	05·04	04·97	04·88	04·69	04·59	05·10
Annual	12·90	12·79	12·68	12·56	*12·47*	12·50	12·59	12·76	12·91	13·01	*13·08*	13·08	12·95	12·84	12·73	12·63	12·56	12·56	12·67	12·77	12·85	12·90	12·91	12·89	12·83	12·77

The initial 9 or 10 of the value is omitted, i.e. 1001·42 is printed 01·42

The monthly and annual values of pressure reduced to mean sea level are computed from the corresponding monthly and annual means of pressure at station level and of temperature. See General Introduction to the Meteorological Tables, 1938.

TEMPERATURE

Monthly and annual means of readings in degrees Absolute at exact hours, G.M.T.

64 ABERDEEN: North-wall screen on tower: h_t = 12·5 m. 1942

	Hour G.M.T. 0	1	2	3	4	5	6	7	8	9	10	11	Noon	13	14	15	16	17	18	19	20	21	22	23	24	Mean
	degrees Absolute																									
Jan.	74·91	74·97	75·05	74·99	74·93	74·78	74·70	*74·65*	74·65	74·80	74·86	75·00	75·31	*75·52*	75·48	75·47	75·36	75·21	75·15	74·90	74·91	74·88	74·84	74·86	74·86	75·01
Feb.	74·00	73·92	73·91	73·84	73·79	*73·65*	*73·65*	73·74	73·71	74·05	74·41	74·99	75·49	75·75	*75·79*	75·71	75·59	75·24	74·93	74·62	74·38	74·30	74·25	74·14	73·99	74·49
Mar.	76·00	75·82	75·72	75·62	75·53	75·48	*75·41*	75·49	76·07	76·59	77·23	77·67	78·05	78·14	78·15	*78·16*	78·03	77·75	77·39	77·05	76·81	76·54	76·52	76·37	76·28	76·74
Apr.	78·59	78·33	78·13	77·95	77·63	*77·45*	78·02	78·76	79·59	80·34	80·86	81·06	81·27	81·53	*81·65*	81·40	81·13	80·95	80·63	80·12	79·64	79·37	79·08	78·70	78·44	79·67
May	80·52	80·41	80·21	79·93	*79·64*	79·96	80·58	81·34	82·01	82·67	83·28	83·69	83·74	83·91	*83·94*	83·81	83·62	83·45	83·23	82·69	82·15	81·65	81·27	80·95	80·63	82·03
June	83·27	82·99	82·85	82·58	*82·40*	82·98	83·86	84·48	85·05	85·58	85·85	86·43	86·44	86·35	86·51	86·53	*86·57*	86·35	85·77	85·27	84·82	84·42	84·04	83·74	83·44	84·80
July	85·22	85·04	84·82	84·59	*84·57*	84·87	85·54	86·23	87·03	87·79	88·13	88·47	88·70	*88·92*	88·82	88·90	88·62	88·52	88·08	87·65	87·02	86·34	85·98	85·63	85·28	86·90
Aug.	86·40	86·16	85·95	85·70	85·56	*85·46*	85·71	86·20	86·86	87·51	88·10	88·34	88·64	88·83	*88·96*	88·76	88·85	88·66	88·21	87·78	87·31	86·96	86·74	86·62	86·37	87·26
Sept.	83·56	83·37	83·21	83·09	*83·06*	83·10	83·14	83·62	84·56	85·43	86·03	86·35	86·59	86·87	86·96	*87·06*	86·86	86·42	85·84	85·01	84·56	84·27	83·94	83·71	83·45	84·86
Oct.	81·53	81·36	81·28	81·07	81·06	81·02	80·92	*80·85*	81·28	82·03	82·74	83·34	83·65	83·90	*84·01*	83·78	83·34	82·83	82·41	81·92	81·79	81·73	81·74	81·54	81·34	82·12
Nov.	78·18	78·00	77·87	77·87	77·74	77·81	77·85	*77·66*	77·84	78·19	78·67	79·44	80·03	*80·35*	80·30	80·13	79·74	79·33	79·10	78·92	78·84	78·68	78·60	78·30	78·09	78·73
Dec.	78·98	78·99	79·02	78·89	78·81	78·76	78·73	78·70	*78·52*	*78·52*	78·71	79·22	79·56	79·66	*79·71*	79·59	79·41	79·35	79·31	79·27	79·29	79·27	79·05	78·99	79·00	79·10
Annual	80·10	79·95	79·83	79·68	*79·55*	79·61	79·84	80·14	80·60	81·13	81·57	82·00	82·29	82·48	*82·52*	82·44	82·26	82·01	81·67	81·27	80·96	80·70	80·50	80·30	80·10	80·98

The initial 2 or 3 of the readings is omitted, i.e. 275·00 degrees Absolute is printed 75·00

Add 0·16° to obtain temperature in degrees Kelvin where $T(°K.) = t(°C.) + 273·16$

Maximum, minimum and daily mean values in degrees Absolute for each day 0h. to 24h., G.M.T.
The initial 2 or 3 of the values is omitted, i.e. 275.0° is printed 75.0°. Add 0.16° to obtain temperature in degrees Kelvin where $T(^\circ K.) = t(^\circ C.) + 273.16$

65 ABERDEEN: North-wall screen on tower: h_t (height of thermometer bulb above ground) = 12.5 m. 1942

	JANUARY			FEBRUARY			MARCH			APRIL			MAY			JUNE		
	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean
	degrees Absolute																	
1	80.4	71.3	76.7	74.8	72.9	74.2	75.6	71.2	73.8	83.9	77.8	80.5	85.0	77.2	81.4	89.2	79.2	83.6
2	81.3	75.4	78.7	75.4	73.2	74.7	76.8	75.1	76.1	79.7	75.3	77.8	85.6	77.2	81.3	93.1	84.8	88.4
3	*83.5*	80.4	*82.1*	75.5	72.4	74.0	77.3	76.3	76.9	77.6	73.3	*76.5*	82.6	76.4	80.1	96.3	86.4	*89.9*
4	80.5	73.5	76.3	74.8	71.5	73.7	77.0	72.7	75.3	82.1	77.3	79.0	83.0	77.3	80.5	95.0	85.1	88.2
5	74.7	72.4	73.4	74.5	71.7	73.0	72.8	*69.2*	*71.0*	83.3	78.1	79.7	88.7	81.1	86.1	90.1	83.9	86.1
6	77.4	72.5	75.6	77.2	72.9	75.0	72.2	70.9	71.8	83.0	79.0	80.6	*92.2*	82.8	*87.1*	*98.2*	82.7	88.6
7	78.4	75.3	77.1	76.9	74.8	75.8	74.5	71.1	73.1	83.3	78.0	80.3	82.8	74.8	79.5	88.2	80.3	84.0
8	79.8	74.8	76.8	78.7	76.4	*77.6*	77.7	69.3	74.1	80.6	77.5	79.1	81.1	*72.9*	*78.0*	84.1	79.9	81.6
9	77.3	73.8	75.3	79.1	74.3	76.6	77.9	74.2	75.8	79.4	74.2	77.8	81.5	73.3	78.5	84.1	79.9	81.7
10	75.4	71.0	73.6	*79.2*	70.5	73.7	77.6	74.4	75.7	84.3	76.8	80.4	81.6	78.4	80.1	83.9	78.3	81.3
11	74.7	69.9	72.9	78.3	70.8	75.1	76.1	71.6	74.0	85.8	75.3	80.7	81.7	76.8	80.2	84.9	78.2	81.4
12	77.2	74.3	75.8	79.1	72.6	76.6	76.4	70.0	73.8	82.1	78.0	80.1	80.6	78.4	79.6	82.0	78.1	*80.5*
13	76.6	74.6	75.6	76.0	71.5	73.4	76.5	74.1	75.5	80.1	76.9	78.6	80.6	76.0	79.2	83.4	81.3	82.5
14	76.3	72.6	74.5	76.7	73.3	74.7	78.6	75.7	76.9	80.0	76.9	78.5	82.5	*72.9*	78.9	82.9	80.7	81.9
15	76.9	75.2	76.1	77.2	71.6	74.4	82.0	76.5	79.0	85.4	76.7	81.6	85.7	79.8	82.1	84.7	80.0	82.5
16	76.3	75.3	75.8	77.0	72.7	74.5	82.3	77.5	80.0	*91.8*	77.6	*85.6*	84.2	80.6	81.8	86.2	*78.0*	82.9
17	76.4	75.2	75.8	76.0	73.7	74.9	84.3	78.5	80.9	86.3	76.5	81.9	87.3	79.7	83.6	89.5	79.0	85.1
18	77.1	75.3	76.2	76.5	71.7	74.9	79.1	75.8	77.6	81.0	73.8	78.2	88.6	80.9	84.0	85.6	80.4	83.1
19	77.2	73.0	75.2	75.6	68.2	72.6	75.8	74.5	75.1	81.7	76.0	79.0	91.0	81.0	85.5	84.1	79.2	82.2
20	74.2	71.9	73.1	78.2	73.6	75.6	77.3	74.5	76.1	85.1	78.0	81.1	87.7	78.7	83.5	85.2	82.6	83.6
21	74.4	72.0	73.3	75.9	71.5	73.8	82.6	76.3	79.0	85.2	77.4	81.7	86.2	80.9	83.4	88.0	83.0	85.1
22	73.8	71.6	72.5	73.1	71.0	*71.9*	83.0	75.9	79.1	85.0	78.3	80.6	84.5	80.7	82.7	93.1	85.6	89.3
23	77.7	73.5	76.0	76.4	72.1	73.9	86.4	75.9	81.1	79.8	76.2	78.3	83.5	81.2	82.2	93.0	83.7	88.4
24	77.3	73.8	75.7	76.6	70.8	73.7	*88.4*	76.4	*82.5*	79.4	74.9	77.5	87.6	81.7	84.3	88.6	80.5	85.4
25	74.7	69.6	72.8	76.3	*68.1*	72.2	82.3	77.7	79.9	80.2	77.3	78.7	83.7	80.3	82.0	87.2	79.4	82.8
26	71.5	*69.4*	*70.3*	76.0	72.3	74.0	79.9	75.9	77.6	80.3	77.3	78.8	84.3	79.8	82.0	89.6	81.2	86.0
27	75.8	71.3	74.0	76.5	73.9	75.1	79.0	74.3	76.0	81.2	78.1	79.6	85.8	79.0	82.3	87.4	83.7	85.7
28	75.8	70.3	73.2	78.7	73.0	76.1	76.6	74.0	75.0	81.2	78.2	79.6	89.6	81.5	85.0	90.6	84.9	87.3
29	76.0	71.5	74.0				78.6	74.5	76.7	81.0	76.4	79.4	86.3	81.9	84.0	90.4	84.8	87.5
30	75.3	70.2	72.7				81.3	77.2	79.2	84.7	*73.0*	78.9	85.7	80.6	82.5	90.9	85.0	87.7
31	75.1	72.8	73.9				82.5	79.1	80.4				83.3	80.5	81.4			
Mean	76.7	73.0	75.0	76.7	72.3	74.5	79.0	74.5	76.7	82.5	76.7	79.7	85.0	78.8	82.0	88.3	81.7	84.8

	JULY			AUGUST			SEPTEMBER			OCTOBER			NOVEMBER			DECEMBER		
	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean
	degrees Absolute																	
1	90.6	84.1	87.0	90.9	86.2	87.8	91.8	86.0	88.7	88.5	81.6	85.1	80.8	76.1	78.2	75.4	72.0	73.2
2	91.0	83.8	87.3	88.8	85.0	86.5	91.2	84.8	87.5	86.1	80.1	83.3	80.1	73.5	76.6	84.6	71.8	*73.0*
3	90.9	85.0	87.5	86.2	83.6	84.9	90.2	84.8	87.4	84.6	80.9	83.0	79.7	72.6	75.1	76.0	72.0	74.1
4	91.2	85.5	87.9	86.1	82.2	*84.1*	89.7	83.1	86.6	86.1	83.1	84.9	78.6	*71.0*	74.7	79.1	72.4	76.2
5	90.6	84.3	87.8	88.6	82.1	85.5	91.8	84.2	88.4	85.9	80.3	83.2	79.6	74.3	76.8	79.8	76.6	78.5
6	92.3	84.9	88.8	88.2	84.8	86.4	89.2	82.5	85.7	85.8	80.4	83.0	83.0	75.0	79.5	82.2	75.0	77.9
7	91.9	85.7	88.7	95.4	85.0	88.8	87.9	82.1	85.0	86.5	82.5	84.3	81.3	75.8	79.0	*86.0*	80.8	83.8
8	90.5	83.2	87.4	91.2	87.0	88.4	*96.7*	86.8	*90.8*	85.0	78.8	82.0	82.1	75.9	79.2	84.4	79.6	81.5
9	88.7	83.9	86.3	92.9	86.6	88.9	91.0	83.7	87.8	86.6	77.9	82.4	83.0	80.4	81.8	84.6	82.5	*83.8*
10	85.7	82.8	*84.6*	87.8	86.2	87.0	90.0	81.9	86.4	85.4	79.0	82.3	83.1	76.4	80.7	83.7	80.6	82.2
11	88.7	81.3	85.4	91.4	86.1	88.0	87.7	82.9	85.8	83.4	77.1	80.5	81.8	73.0	78.2	83.9	78.8	80.9
12	89.5	83.2	85.8	89.9	85.8	87.8	86.9	80.3	83.5	83.7	78.0	81.4	82.0	74.6	78.9	79.6	76.8	78.1
13	*94.6*	85.0	88.7	89.9	85.8	87.3	86.5	77.3	83.0	84.6	77.5	81.2	82.2	74.5	79.0	83.3	77.9	81.8
14	90.0	84.8	87.1	91.1	82.8	87.2	88.4	84.6	86.1	*89.7*	81.7	*85.8*	*87.7*	79.4	*83.5*	81.7	79.7	80.7
15	90.2	83.2	86.9	89.3	84.5	87.8	88.0	81.5	84.4	86.6	81.9	83.8	85.5	78.4	81.5	82.0	80.7	81.5
16	90.3	85.6	87.3	91.7	85.9	88.2	86.9	82.1	84.8	86.1	81.8	83.4	80.0	77.8	78.9	82.1	80.6	81.5
17	87.3	84.4	85.7	91.8	86.5	88.7	87.2	81.9	84.2	83.3	80.4	81.5	82.1	76.6	79.7	82.1	80.9	81.6
18	86.3	83.1	84.6	90.8	86.4	88.1	88.9	81.3	84.5	82.7	80.9	81.6	82.2	75.5	80.8	81.0	78.9	80.0
19	91.2	83.2	86.8	92.9	86.4	88.9	87.0	80.9	84.3	87.5	82.5	84.6	82.8	74.1	78.3	80.7	76.2	79.9
20	*94.6*	85.9	*89.6*	89.9	85.3	87.5	85.2	83.2	84.3	85.1	78.8	82.4	81.3	75.0	78.8	81.5	75.1	78.6
21	92.2	85.8	88.7	89.3	85.8	87.1	87.1	83.4	85.5	85.0	76.5	81.2	75.7	73.0	*74.6*	83.6	80.6	82.3
22	89.6	85.1	87.1	90.9	85.4	87.6	87.3	80.9	84.3	87.8	82.0	84.5	80.2	74.3	77.2	84.0	76.1	81.0
23	88.0	84.2	85.9	87.5	83.9	85.7	86.3	79.2	82.4	85.6	80.1	82.7	82.0	79.3	80.9	83.2	75.1	80.0
24	93.9	84.1	86.9	87.2	*79.2*	84.3	85.0	77.1	80.6	82.6	77.9	80.2	83.1	80.0	81.9	84.0	77.7	81.6
25	92.1	82.9	87.4	87.0	85.3	86.4	82.5	*75.1*	*79.0*	82.0	76.5	79.1	81.3	79.6	80.5	79.1	75.8	77.5
26	87.2	82.7	85.0	92.2	86.3	88.3	83.0	75.4	79.4	82.6	78.3	80.5	81.6	78.5	80.5	82.6	76.7	79.9
27	88.4	*79.7*	84.7	*96.1*	85.0	*90.7*	85.2	76.5	81.8	82.8	78.5	80.5	81.3	77.4	79.9	80.7	75.2	77.6
28	88.9	81.6	85.6	95.1	84.6	89.0	86.6	82.2	84.2	83.1	*74.7*	80.0	80.6	75.9	76.9	81.6	76.5	79.1
29	89.3	83.2	85.7	86.7	84.0	85.4	86.1	82.7	85.0	82.9	79.9	81.0	78.6	73.0	75.3	77.1	*71.6*	73.4
30	90.1	82.9	86.8	86.3	84.2	85.5	85.5	81.9	84.2	80.5	76.7	78.7	77.9	72.9	75.1	75.0	72.5	74.3
31	94.3	83.2	88.9	89.5	85.9	87.1				80.3	75.6	*77.7*				78.0	75.0	76.8
Mean	90.3	83.8	86.9	90.1	85.0	87.3	87.9	81.7	84.9	84.8	79.4	82.1	81.4	75.8	78.7	81.4	76.8	79.1
									Annual	83.7	78.3	81.0						

MEAN RELATIVE HUMIDITY AND VAPOUR PRESSURE FOR EACH DAY

Mean percentages from readings at exact hours 0h. to 24h., G.M.T.; vapour pressure from daily mean temperature and relative humidity

66 ABERDEEN: North-wall screen on tower: h_t = 12·5 m. 1942

	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER	
	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.
	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.
1	85·8	6·8	87·0	5·8	70·7	4·6	64·9	6·7	72·3	8·0	87·3	10·2	70·0	11·2	90·4	15·2	76·8	13·7	83·4	11·8	88·1	7·8	83·4	5·2
2	84·0	7·7	83·5	5·8	72·0	5·5	74·6	6·4	68·0	7·5	75·5	13·2	78·5	12·8	92·5	14·3	72·3	11·9	73·5	9·2	84·6	6·7	77·4	*4·7*
3	89·0	*10·3*	92·9	6·1	83·0	6·7	80·6	6·3	66·0	6·7	71·9	13·8	83·6	13·8	71·9	*10·0*	83·7	13·7	85·5	10·5	85·2	6·1	*73·0*	4·8
4	82·0	6·4	78·7	5·1	76·3	5·5	82·8	7·7	69·4	7·2	75·2	13·0	80·8	13·7	77·3	10·2	72·1	11·2	87·8	12·2	84·9	5·9	81·5	6·3
5	82·5	5·2	74·5	4·5	74·0	4·3	89·3	8·8	60·9	9·2	87·4	13·2	78·8	13·3	72·2	10·5	69·4	12·1	69·6	8·7	*91·2*	7·3	90·7	8·2
6	72·6	5·4	85·3	6·0	68·6	*3·8*	84·3	*8·8*	*49·7*	8·0	78·7	14·0	69·6	12·5	73·7	11·3	66·2	9·7	72·0	8·8	90·4	8·8	87·2	7·5
7	85·3	7·0	86·4	6·4	65·7	4·0	84·2	7·6	66·4	6·4	*60·1*	7·9	69·3	12·4	87·5	15·7	87·4	12·3	75·9	10·2	80·9	7·6	87·4	*11·3*
8	83·2	6·7	84·0	*7·1*	83·7	5·5	88·4	8·3	69·9	*6·1*	70·1	*7·8*	74·6	12·2	91·2	16·0	82·4	*17·1*	72·8	8·4	80·8	7·7	77·8	8·6
9	82·2	5·9	81·2	6·4	77·6	5·8	*93·8*	8·1	76·1	6·9	80·7	9·1	85·4	13·0	81·6	14·7	*59·9*	10·1	76·5	9·0	86·7	*9·8*	87·0	11·3
10	84·4	5·4	82·2	5·3	78·1	6·0	74·3	7·7	77·6	7·8	72·7	7·9	87·6	12·0	92·6	14·8	69·1	10·6	73·6	8·6	87·8	9·2	88·0	10·3
11	82·5	5·0	68·7	4·9	75·8	5·0	81·4	8·6	72·1	7·3	75·2	8·3	78·2	11·3	87·9	15·0	80·6	11·9	73·0	7·6	83·9	7·4	85·8	9·1
12	84·6	6·3	73·1	5·8	75·1	4·9	83·1	8·4	68·1	6·6	81·9	8·5	75·4	11·1	87·0	14·6	83·2	10·6	83·9	9·3	81·7	7·6	85·1	7·5
13	91·9	6·8	77·5	4·9	77·3	5·7	87·3	8·0	70·6	6·7	84·5	10·0	79·5	14·2	86·6	14·1	86·7	10·6	76·6	8·3	79·5	7·4	86·3	9·8
14	80·6	5·5	72·8	5·0	87·6	7·1	87·1	7·9	81·5	7·6	81·9	9·3	79·2	12·7	88·4	14·3	87·0	13·1	86·4	12·8	77·1	9·8	88·9	9·3
15	*65·9*	5·0	82·9	5·6	94·0	8·4	70·8	7·9	79·1	9·1	76·6	9·1	73·0	11·6	88·1	14·8	66·0	8·9	*63·8*	8·3	73·4	8·1	*94·7*	10·5
16	66·1	4·9	82·9	5·6	91·1	9·1	59·6	8·7	92·2	10·5	79·5	9·7	87·3	14·2	*66·1*	11·4	64·9	9·0	65·9	8·3	*69·0*	6·4	89·9	10·0
17	71·4	5·3	83·3	5·8	90·9	*9·7*	*56·7*	6·5	86·0	11·0	77·2	10·9	82·7	12·1	78·3	14·0	77·0	10·2	89·5	9·9	73·6	7·2	94·5	10·6
18	85·0	6·5	*95·0*	6·7	*95·9*	8·1	82·7	7·3	86·0	*11·3*	70·7	8·7	81·6	11·1	83·0	14·2	83·0	11·3	*99·3*	11·1	81·3	8·6	93·6	9·4
19	78·7	5·6	82·6	4·9	84·1	6·0	92·6	8·7	61·8	9·0	81·4	9·5	83·0	13·1	81·0	14·6	81·2	10·9	99·1	*13·5*	82·4	7·3	90·3	9·0
20	89·7	5·5	79·5	5·9	85·4	6·5	73·6	7·9	64·7	8·2	92·4	11·8	75·5	14·3	79·9	13·2	90·9	12·2	93·5	11·0	75·9	7·0	87·1	8·0
21	86·8	5·4	72·7	4·7	90·8	8·5	67·5	7·6	72·1	9·1	*97·8*	13·8	76·1	13·6	83·3	13·4	94·3	13·7	83·0	9·0	79·7	*5·5*	85·0	10·0
22	91·7	5·4	84·8	4·8	93·9	8·8	77·2	8·1	86·7	10·4	86·7	*16·1*	*91·2*	*14·7*	85·9	14·3	79·3	10·6	79·6	10·8	70·3	5·8	84·5	9·1
23	*93·5*	7·1	75·1	4·9	68·6	7·4	66·1	5·9	*94·3*	11·1	66·3	11·6	77·6	11·5	84·4	12·4	76·8	9·1	70·2	8·5	86·8	9·3	87·4	8·8
24	92·3	6·8	83·5	5·4	59·7	7·1	67·0	*5·7*	74·2	9·9	70·0	10·1	79·3	12·6	84·7	11·3	86·3	9·0	82·4	8·4	84·2	9·6	82·9	9·3
25	92·1	5·5	78·8	*4·5*	*56·8*	5·7	80·6	7·3	85·9	9·9	72·4	8·8	*63·6*	*10·4*	96·2	14·8	84·5	7·9	87·4	8·2	85·2	8·8	83·4	7·0
26	87·2	*4·4*	78·6	5·2	67·2	5·7	75·4	7·0	82·7	9·5	75·8	11·4	74·5	10·5	*96·5*	*16·8*	74·9	*7·2*	90·2	9·3	82·5	8·5	91·0	9·1
27	86·5	5·7	84·0	6·0	76·6	5·8	80·6	7·9	84·9	10·0	80·4	11·8	84·6	11·6	81·1	16·4	79·1	9·0	84·7	8·8	84·9	8·4	85·3	7·2
28	84·1	5·2	*67·6*	5·2	61·2	4·3	75·4	7·3	72·0	10·1	77·9	12·7	74·2	10·8	80·7	14·6	89·0	11·8	88·9	8·9	71·9	5·8	78·1	7·4
29	87·7	5·8			79·5	6·3	73·6	7·1	77·9	10·2	73·4	12·1	83·9	12·3	88·6	12·7	93·7	13·1	78·5	8·4	85·0	6·1	83·0	5·2
30	88·7	5·3			88·2	8·4	79·7	7·4	81·0	9·6	60·4	10·1	80·6	12·7	83·4	12·1	*94·6*	12·6	81·8	*7·5*	78·6	5·6	78·2	5·2
31	80·0	5·2			91·2	9·4			79·7	8·8			80·3	14·5	96·1	15·4			88·3	7·5			74·4	6·0
Mean*	83·8	6·0	80·7	5·5	78·7	6·4	77·8	7·6	75·1	8·7	77·4	10·8	78·7	12·5	84·5	13·8	79·8	11·2	81·2	9·4	81·6	7·6	85·3	8·2

* Mean of the column

RELATIVE HUMIDITY

Monthly and annual means of values at exact hours, G.M.T.

67 ABERDEEN: h_t = 12·5 m. 1942

	Hour G.M.T. 0	1	2	3	4	5	6	7	8	9	10	11	Noon	13	14	15	16	17	18	19	20	21	22	23	24	Mean*
	per cent.																									
Jan.	83·9	84·4	83·5	83·6	82·4	*82·3*	83·0	83·4	83·5	83·7	83·7	84·7	82·6	82·5	83·4	82·4	83·4	84·6	84·7	*85·8*	85·4	85·1	85·7	83·9	83·6	83·8
Feb.	81·5	82·3	82·7	83·2	83·1	84·6	85·0	84·6	*85·3*	83·7	80·6	79·2	76·4	*74·3*	74·5	76·1	74·7	77·1	79·4	80·3	82·0	81·3	82·1	82·3	81·7	80·7
Mar.	81·2	82·3	83·1	82·5	83·1	83·2	83·1	*83·5*	81·2	78·5	77·0	75·5	72·7	*72·6*	73·3	73·3	73·0	74·8	75·9	78·2	79·2	80·8	80·5	81·3	80·7	78·7
Apr.	80·9	82·7	83·9	84·2	*85·2*	85·0	82·5	80·2	77·6	75·2	73·3	73·0	73·2	72·4	*70·7*	71·0	72·8	73·4	74·2	76·1	79·1	80·6	80·2	80·1	81·3	77·8
May	80·7	82·0	83·2	83·9	*84·4*	82·5	81·1	78·2	75·5	72·6	70·0	68·6	69·2	67·6	*66·9*	67·6	69·4	70·2	70·5	72·5	74·6	76·8	76·9	78·7	80·7	75·1
June	84·5	84·3	85·1	86·2	*86·3*	83·3	79·5	75·2	73·3	71·4	71·3	*68·9*	69·2	71·0	70·7	71·3	70·7	72·1	74·7	77·6	80·4	82·1	84·2	84·4	84·1	77·4
July	85·7	85·7	86·3	85·9	86·3	86·3	83·9	80·9	77·3	73·4	72·5	72·1	71·1	*70·2*	71·5	71·0	72·2	72·5	74·5	76·3	80·0	82·9	84·3	85·6	*86·4*	78·7
Aug.	87·9	88·5	89·2	*89·7*	89·6	89·5	89·0	88·1	85·4	82·5	79·6	79·2	78·9	78·5	*78·3*	79·3	79·1	80·5	82·5	84·0	85·6	87·4	87·5	87·2	88·0	84·5
Sept.	85·0	85·5	86·4	86·1	*86·5*	85·7	85·5	84·8	81·9	78·5	75·2	74·2	73·5	72·4	71·0	*70·6*	71·2	74·1	75·8	79·4	81·4	81·9	83·4	84·0	85·1	79·8
Oct.	83·1	83·3	84·2	84·6	84·4	84·5	85·6	*85·9*	85·0	82·5	79·6	76·5	75·6	74·7	*73·5*	74·8	77·5	79·6	81·2	83·6	82·8	82·1	81·1	82·7	83·1	81·2
Nov.	*84·4*	82·9	83·6	82·5	83·2	83·4	83·2	84·0	83·8	82·4	80·8	78·8	76·3	*74·9*	75·5	77·2	78·8	81·3	82·3	83·2	83·8	84·1	83·5	84·3	84·3	81·6
Dec.	85·9	87·5	86·2	86·4	86·4	86·4	87·1	87·5	*87·6*	86·5	86·7	84·6	82·2	81·9	*81·7*	82·7	83·2	83·6	85·0	85·2	85·5	85·2	85·4	86·4	85·5	85·3
Annual	83·7	84·3	84·8	84·9	*85·1*	84·7	84·1	83·0	81·5	79·2	77·5	76·3	75·1	74·4	*74·2*	74·8	75·5	77·0	78·4	80·2	81·7	82·5	82·9	83·4	83·7	80·4

VAPOUR PRESSURE

Monthly and annual means of values at exact hours, G.M.T.

68 ABERDEEN: h_t = 12·5 m. 1942

	Hour G.M.T. 0	1	2	3	4	5	6	7	8	9	10	11	Noon	13	14	15	16	17	18	19	20	21	22	23	24	Mean*
	millibars																									
Jan.	6·0	5·9	5·9	5·9	5·8	*5·7*	5·7	5·7	5·7	5·8	5·9	6·0	6·0	6·0	6·0	6·0	6·0	*6·1*	6·0	6·0	6·0	6·0	6·0	5·9	5·8	5·9
Feb.	5·6	*5·4*	5·4	5·4	5·4	5·4	5·4	5·5	5·5	5·5	5·5	5·6	5·6	5·5	5·6	*5·7*	5·5	5·5	5·6	5·5	5·5	5·5	5·5	5·5	5·4	5·5
Mar.	6·3	6·2	6·2	6·1	6·1	6·1	*6·0*	6·1	6·2	6·2	6·4	6·4	6·4	6·4	*6·5*	6·5	6·4	6·4	6·3	6·4	6·4	6·4	6·3	6·3	6·2	6·3
Apr.	7·3	7·4	7·4	7·3	7·2	*7·1*	7·2	7·4	7·5	7·7	7·8	7·9	8·0	*8·1*	7·9	7·8	7·9	7·9	7·8	7·7	7·7	7·7	7·4	7·3	7·3	7·6
May	8·5	8·5	8·5	8·4	*8·2*	8·2	8·5	8·6	8·7	8·7	8·8	8·8	*8·9*	8·8	8·7	8·8	8·9	8·9	8·8	8·7	8·6	8·6	8·4	8·4	8·4	8·6
June	10·7	10·3	10·4	10·3	*10·2*	10·2	10·3	10·2	10·3	10·4	10·6	10·6	10·7	10·9	10·9	11·0	11·0	11·0	11·0	11·1	*11·1*	11·1	11·1	10·9	10·6	10·7
July	12·2	12·1	12·0	*11·7*	11·8	12·0	12·2	12·3	12·4	12·3	12·5	12·7	12·7	12·7	*12·9*	12·8	12·8	12·8	12·8	12·7	12·8	12·7	12·6	12·5	12·4	12·5
Aug.	13·6	13·4	13·3	13·2	13·0	*12·9*	13·1	13·4	13·5	13·6	13·7	13·8	14·0	14·1	14·2	14·2	14·2	*14·3*	14·3	14·1	14·0	13·9	13·7	13·6	13·5	13·7
Sept.	10·7	10·8	10·8	10·6	10·7	*10·6*	10·6	10·9	11·2	11·3	11·3	11·4	11·4	*11·5*	11·3	11·3	11·3	11·4	11·2	11·1	11·1	10·9	10·9	10·8	10·8	11·1
Oct.	9·1	9·2	9·2	9·1	*9·1*	9·1	9·1	9·1	9·3	9·5	9·6	9·6	9·7	9·7	9·7	9·7	*9·7*	9·7	9·6	9·5	9·4	9·3	9·1	9·2	9·1	9·4
Nov.	7·4	7·2	7·2	7·1	*7·1*	7·2	7·2	7·2	7·2	7·3	7·4	7·6	7·7	7·7	*7·7*	*7·8*	7·8	7·8	7·7	7·7	7·7	7·7	7·6	7·5	7·4	7·5
Dec.	8·1	*8·2*	8·1	8·0	8·0	7·9	8·0	8·0	7·9	*7·8*	7·9	8·0	8·0	8·0	8·0	8·1	8·0	8·0	8·1	8·1	8·2	8·1	8·0	8·0	8·0	8·0
Annual	8·5	8·4	8·4	8·3	*8·3*	8·3	8·3	8·4	8·5	8·6	8·7	8·8	8·8	8·8	8·8	*8·8*	8·8	8·8	8·8	8·7	8·7	8·7	8·6	8·5	8·4	8·6

* Mean of values, 1,2,·····23, ½(0 + 24).

Amount in millimetres, duration in hours and maximum rate of fall for each day 0h. to 24h., G.M.T.

69 ABERDEEN: h_r(height of receiving surface above M.S.L.) = height of station above M.S.L. + height of receiving surface above ground = 24·1 m. + 0·6 m. 1942

	JANUARY			FEBRUARY			MARCH			APRIL			MAY			JUNE		
	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate
	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.
1	...	...	...	5·4	12·0	1	...	...	...	...	...	...	...	...	...	3·5	5·7	2
2	0·8	2·0	...	4·9	13·0	1	...	...	...	2·7	2·1	5	...	...	...	...	...	...
3	8·1	6·7	5	*14·1*	*22·0*	2	...	...	...	2·1	4·9	1	0·1	0·5	...	...	...	...
4	7·0	8·5	*12*	4·0	12·3	1	...	...	...	1·7	3·7	...	...	...	...	...	...	...
5	3·0	4·8	3	2·7	4·1	...	1·7	3·8	5	2·0	6·3	...	...	...	...	0·1	0·4	...
6	0·1	0·2	...	1·5	4·0	1	...	...	...	0·5	1·0	...	...	...	...	0·9	1·4	8
7	1·9	1·5	6	0·5	2·2	...	...	...	...	1·7	2·2	*10*	...	...	...	0·4	0·5	4
8	0·5	0·8	5	...	...	...	0·5	1·6	...	*20·0*	*13·8*	4	...	...	...	0·1	0·3	...
9	1·5	2·2	4	...	...	...	0·1	0·4	...	3·0	2·6	3	0·2	0·3	3	2·6	4·2	2
10	...	...	...	4·9	8·3	2	0·5	1·8	...	...	...	...	0·3	0·6	...	...	...	...
11	...	...	...	...	...	...	0·4	1·0	...	...	...	...	...	...	...	1·0	4·0	2
12	2·9	4·4	2	1·4	1·2	3	0·8	2·5	...	...	...	...	...	...	...	*9·8*	6·5	*22*
13	8·5	17·1	1	1·7	3·1	1	...	...	...	...	...	...	...	...	...	0·2	1·0	...
14	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·7	0·6	3
15	...	...	...	...	...	...	3·4	4·0	4	...	...	...	...	...	...	...	...	...
16	...	...	...	...	...	...	0·6	3·1	...	...	...	...	12·0	6·5	5	...	...	...
17	0·3	2·0	...	...	...	...	6·8	4·9	4	...	...	...	0·2	0·2	...	...	...	...
18	1·9	4·1	1	2·7	8·1	1	*6·9*	*9·0*	*20*	...	...	...	9·3	5·8	11	...	...	...
19	4·8	6·5	2	...	...	...	0·1	0·5	...	...	...	...	...	...	...	0·6	0·9	...
20	3·8	11·0	1	0·4	0·8	...	...	...	...	...	...	...	...	...	...	0·1	0·2	...
21	2·2	7·7	1	0·3	1·0	...	0·6	2·1	...	...	...	...	0·2	0·3	...	4·2	*8·5*	1
22	2·9	11·5	...	3·0	5·8	*4*	0·1	0·6	...	0·2	1·3	...	1·0	2·6	2	1·0	1·3	4
23	*18·2*	19·9	2	...	...	...	...	...	...	0·9	3·2	...	2·4	3·5	3	...	...	...
24	10·4	16·1	2	0·1	0·5	...	...	...	...	...	...	...	7·6	4·6	18	...	...	...
25	6·8	*21·0*	2	...	...	...	...	...	...	...	...	...	5·5	6·4	4	...	...	...
26	0·6	3·1	...	...	...	...	...	...	...	...	...	...	...	...	...	0·1	0·1	...
27	4·1	5·4	2	3·3	4·5	3	...	...	...	...	...	...	*12·3*	7·8	*26*	0·4	0·8	1
28	...	...	...	...	...	...	...	...	...	...	...	...	6·9	2·2	*26*	...	...	...
29	7·9	15·0	2				0·2	1·0	...	...	...	...	3·7	1·7	7	...	...	...
30	16·9	10·2	10				...	...	...	...	...	...	12·2	*9·3*	18	...	...	...
31	0·2	1·0	...				2·7	3·7	3				3·8	6·8	7			
Total	115·3	182·7	-	50·9	102·9	-	25·4	40·0	-	34·8	41·1	-	77·7	59·1	-	25·7	36·4	-

	JULY			AUGUST			SEPTEMBER			OCTOBER			NOVEMBER			DECEMBER		
	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate
	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.
1	...	...	...	...	...	...	0·1	0·3	...	...	...	...	0·1	0·1	...	2·3	3·2	2
2	...	...	...	...	...	...	0·1	0·3	...	...	...	...	...	...	...	0·7	0·6	3
3	0·7	0·8	4	...	...	...	3·9	3·6	2	3·3	3·1	2	...	...	...	...	...	...
4	1·7	1·8	6	...	...	...	0·4	0·3	...	0·6	0·3	3	...	...	...	0·2	0·6	...
5	...	...	...	...	...	...	0·1	0·2	...	0·2	0·2	...	0·1	0·5	...	7·4	8·2	8
6	...	...	...	...	...	...	0·6	0·2	17	...	...	...	2·7	3·6	4	0·5	1·1	...
7	...	...	...	3·0	3·6	5	6·7	4·1	12	...	...	...	...	...	...	...	...	...
8	0·7	0·7	4	6·1	4·9	11	...	...	...	4·1	3·3	5	...	...	...	3·1	2·4	7
9	*8·1*	3·0	11	0·6	0·5	8	...	...	...	...	...	...	1·9	2·0	4	0·5	0·9	6
10	1·2	4·5	...	5·4	3·7	17	...	...	...	0·2	0·1	4	*5·8*	*4·5*	6	*12·2*	6·2	*18*
11	...	...	...	*12·9*	4·3	*73*	0·2	0·5	...	...	...	...	...	...	...	0·6	0·7	...
12	...	...	...	1·3	1·1	20	...	...	...	3·2	3·0	5	4·2	3·0	*30*	...	...	...
13	2·6	1·5	8	5·0	1·4	25	...	...	...	...	...	...	...	...	...	3·3	2·4	8
14	5·3	1·6	*90*	...	...	...	0·5	0·2	9	5·0	4·1	4	...	...	...	...	...	...
15	0·4	1·3	1	1·1	0·9	...	...	...	...	...	...	...	...	...	...	3·5	5·3	3
16	0·9	2·0	2	...	...	...	...	...	...	...	...	...	0·1	0·2	1	4·2	2·5	7
17	5·3	7·2	9	...	...	...	1·0	2·2	1	11·3	15·3	3	...	...	...	8·4	4·3	11
18	...	...	...	...	...	...	1·1	1·0	3	*26·6*	*20·9*	*17*	...	...	...	...	...	...
19	...	...	...	...	...	...	0·4	0·3	3	4·3	7·0	14	...	...	...	0·3	0·7	...
20	...	...	...	...	...	...	*22·9*	*11·1*	28	16·1	8·0	16	...	...	...	0·3	0·9	...
21	6·8	4·8	18	2·9	2·5	7	17·4	4·3	30	0·9	1·2	1	0·6	0·4	10	...	...	...
22	4·1	*7·5*	7	5·1	0·7	61	0·2	0·6	...	1·2	0·7	6	...	...	...	0·1	0·1	...
23	0·2	2·0	...	...	...	...	...	...	...	2·4	1·3	4	0·1	0·2	...	...	...	...
24	0·7	1·0	...	...	...	...	1·6	0·9	18	0·7	0·5	...	...	...	...	...	...	...
25	0·3	0·2	12	5·2	2·8	24	0·8	0·4	3	...	...	...	...	...	...	...	...	...
26	...	...	...	0·5	0·5	...	0·1	0·2	...	14·9	6·3	13	0·1	0·1	2	0·2	0·2	...
27	2·7	1·5	5	...	...	...	...	...	...	0·5	0·5	...	0·1	0·3	...	...	...	...
28	...	...	...	...	...	...	2·9	2·0	7	0·5	0·4	3	1·0	0·6	9	...	...	...
29	1·4	0·9	6	8·8	*7·3*	7	4·1	1·9	*66*	0·8	2·4	14	2·1	1·4	23	2·7	*6·7*	3
30	...	...	...	2·0	2·0	9	9·1	6·7	9	0·6	0·8	2	0·6	1·3	5	2·3	3·7	4
31	0·5	0·7	...	5·5	3·5	22				0·7	0·6	2				0·4	0·5	4
Total	43·6	43·0	-	65·4	39·7	-	74·2	41·3	-	98·1	80·0	-	19·5	18·2	-	53·2	51·2	-

Monthly and annual totals of amounts in sixty-minute periods between exact hours, G.M.T.

70 ABERDEEN: h_r = 24·1 m. + 0·6 m. 1942

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	0-24
	millimetres																								
Jan.	5·8	6·1	5·2	2·5	3·6	3·6	1·8	2·6	3·9	3·2	3·5	2·9	3·3	3·3	4·4	4·2	4·3	6·0	7·2	8·3	*12·3*	6·3	6·0	5·0	115·3
Feb.	1·5	1·8	1·0	3·5	3·0	2·3	1·7	2·8	2·8	2·5	2·8	3·8	2·3	3·6	*3·9*	2·1	1·5	1·8	0·9	1·4	1·1	1·3	0·7	0·8	50·9
Mar.	1·3	1·8	2·7	1·3	0·4	0·3	1·3	0·5	*4·9*	4·5	1·3	0·6	0·4	0·5	0·3	0·3	0·4	0·2	0·6	0·4	0·6	0·3	0·4	0·1	25·4
Apr.	2·7	1·0	1·8	*4·9*	3·3	4·0	2·2	0·7	0·6	0·3	1·0	1·7	2·5	0·5	0·6	2·1	2·0	0·1	···	0·2	0·3	0·5	0·6	1·2	34·8
May	4·8	5·2	4·4	5·3	*7·4*	*7·4*	6·4	3·5	0·6	0·2	1·8	3·1	3·1	0·8	4·1	4·7	1·3	0·3	0·5	0·5	0·4	1·6	4·9	5·4	77·7
June	0·4	0·2	0·5	0·8	1·4	1·0	1·0	0·5	0·1	0·7	0·7	0·8	0·7	0·5	1·3	0·3	1·2	0·6	1·9	*4·0*	*4·0*	1·2	1·4	0·5	25·7
July	0·5	0·5	1·1	4·3	1·9	1·6	0·9	0·7	0·3	0·4	3·6	3·1	2·0	4·3	2·7	1·9	4·2	*5·0*	0·8	1·2	0·5	0·7	0·6	0·8	43·6
Aug.	1·1	2·2	3·1	0·6	1·2	2·1	0·6	1·2	2·0	2·2	3·1	1·6	4·0	5·5	5·6	4·4	2·2	*7·2*	4·5	1·4	4·7	1·8	0·5	2·6	65·4
Sept.	4·5	7·6	*8·3*	1·4	3·2	0·1	0·2	0·3	0·3	1·1	2·5	3·2	2·7	4·9	5·6	3·8	8·1	5·4	0·6	2·7	0·7	1·7	2·3	3·0	74·2
Oct.	2·7	2·0	6·5	6·8	7·3	5·1	*7·7*	*7·7*	2·7	2·2	5·1	4·4	4·9	2·9	2·8	2·7	4·3	4·5	2·5	2·0	1·2	1·8	2·6	5·7	98·1
Nov.	0·2	1·1	0·1	0·2	0·8	0·7	*2·6*	0·9	0·8	0·3	0·3	0·1	2·0	1·2	2·5	0·8	0·5	0·3	1·2	0·7	0·3	0·2	1·3	0·4	19·5
Dec.	1·6	1·8	1·2	1·5	2·1	1·9	0·5	0·4	0·2	0·8	0·8	1·0	1·8	6·1	*6·3*	2·0	4·6	4·4	6·0	4·3	1·8	0·8	0·6	0·7	53·2
Annual	27·1	31·3	35·9	33·1	35·6	30·1	26·9	21·8	19·2	18·4	26·5	26·3	29·7	34·1	*40·1*	29·3	34·6	35·8	26·7	27·1	27·9	*18·2*	21·9	26·2	683·8

RAINFALL

Monthly and annual totals of durations in sixty-minute periods between exact hours, G.M.T.

71 ABERDEEN: h_r = 24·1 m. + 0·6 m. 1942

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	0-24
	hours																								
Jan.	8·1	*9·8*	9·1	8·7	7·9	8·9	5·6	6·9	7·0	7·9	8·0	7·0	6·3	6·2	8·4	6·2	6·6	7·0	7·3	6·9	7·5	8·4	8·5	8·5	182·7
Feb.	4·7	5·0	3·7	5·3	5·2	5·5	6·0	4·7	4·7	4·9	*7·1*	6·3	3·6	4·1	5·4	4·3	3·8	3·1	2·2	3·3	3·0	2·5	2·0	2·5	102·9
Mar.	2·1	1·0	1·0	2·0	1·4	1·1	1·8	1·2	3·0	*4·0*	2·1	1·6	1·5	1·5	1·1	1·6	1·1	1·0	1·6	2·9	2·3	1·4	1·1	0·6	40·0
Apr.	2·7	3·6	*3·8*	*3·8*	2·2	2·4	1·5	1·0	1·0	0·4	0·8	1·8	2·2	1·4	2·5	2·1	2·1	0·4	···	0·7	0·6	0·9	1·3	1·9	41·1
May	3·0	3·3	3·5	4·4	3·6	4·2	*5·2*	2·4	2·2	1·0	1·6	1·8	1·9	1·0	2·6	2·0	1·7	1·0	0·9	1·4	1·2	2·6	3·6	3·0	59·1
June	1·0	0·4	0·8	1·2	1·7	2·2	2·5	1·0	0·3	0·8	1·0	1·6	1·2	1·0	1·7	0·9	1·8	1·1	2·4	*3·3*	2·7	2·9	2·3	0·6	35·4
July	1·7	2·6	1·0	1·8	1·6	1·9	2·1	2·4	2·0	1·5	0·8	1·7	1·6	2·2	*2·9*	1·2	2·3	2·3	1·0	1·5	1·4	0·8	2·0	2·7	43·0
Aug.	1·7	1·3	1·4	1·5	1·5	1·7	1·8	2·3	1·6	1·7	1·4	0·6	1·9	*2·5*	1·4	2·3	1·8	*2·5*	2·1	1·0	2·1	1·3	0·8	1·5	39·7
Sept.	3·0	2·5	2·5	1·5	1·8	0·2	0·1	0·9	0·2	1·8	2·1	2·1	*3·3*	3·0	3·0	3·0	2·9	1·3	0·7	0·8	0·6	0·7	1·6	1·7	41·3
Oct.	2·7	3·4	4·8	4·3	4·7	3·5	4·3	3·4	3·5	3·1	4·1	*5·2*	4·6	2·6	2·7	3·1	3·0	2·3	2·7	2·4	1·7	2·8	2·3	2·8	80·0
Nov.	0·1	0·7	0·2	0·4	0·2	1·1	1·5	0·9	0·8	0·3	0·4	0·2	1·2	1·0	1·3	1·0	*1·6*	0·3	1·1	0·7	0·8	0·7	1·2	0·5	18·2
Dec.	1·6	1·5	2·0	2·6	2·9	1·4	0·6	0·4	0·4	1·0	1·5	2·1	2·2	2·4	3·6	3·2	3·9	3·1	3·6	*4·6*	2·7	1·3	1·0	1·6	51·2
Annual	32·4	35·1	33·8	*37·5*	34·7	34·1	33·0	27·5	26·7	28·4	30·9	32·0	31·5	28·9	36·6	30·9	32·6	*25·4*	25·6	29·5	26·6	26·3	27·7	27·9	735·6

NOTES ON RAINFALL

72 ABERDEEN: 1942

Dry Periods

The following definitions are adopted by the British Rainfall Organization
An "absolute drought" is a period of at least 15 consecutive days to none of which is credited 0·2 mm. of rain or more
A "partial drought" is a period of at least 29 consecutive days, the mean daily rainfall of which does not exceed 0·2 mm.
A "dry spell" is a period of at least 15 consecutive days, to none of which is credited 1·0 mm. or more.

"Absolute drought": April 24–May 8
"Partial drought": April 10–May 15
"Dry spells": April 10–May 15

Wet Periods

The following definitions are adopted by the British Rainfall Organization
A "rain spell" is a period of at least 15 consecutive days to each of which is credited 0·2 mm. of rain or more
A "wet spell" is a period of at least 15 consecutive days to each of which is credited 1·0 mm. of rain or more

"Rain spells": No occasions
"Wet spells": No occasions

Rainfall Duration

Hours	0·1–1·0	1·1–2·0	2·1–6·0	6·1–12·0	>12·0
Number of days	75	28	62	30	11

Continuous or Heavy Falls

The day with the greatest duration was Feb. 3 (22·0 hr.) the amount being 14·1 mm. The heaviest fall amounting to 40 mm. occurred between 09h. on September 20 and 06h. on September 21. The longest continuous fall lasted from 06h. on October 17 to 05h. on October 19, 40 mm. being recorded.

Heavy Falls in Short Periods

The heaviest falls were:- 10 mm. in 1 hr. 20 min. on January 30 (snow); 10 mm. in 1 hr. 10 min. on September 21. This includes a fall of 5 mm. in 20 min.

Rate of Rainfall (Jardi Recorder)

The highest instantaneous rate was 90 mm./hr. on July 14.

73 ABERDEEN: h_s (height of recorder above ground) = 20·7 m. 1942

	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER	
	Duration	Per cent. of possible	Duration	Per cent. of possible	Duration	Per cent. of possible	Duration	Per cent. of possible	Duration	Per cent. of possible	Duration	Per cent. of possible	Duration	Per cent. of possible	Duration	Per cent. of possible	Duration	Per cent. of possible	Duration	Per cent. of possible	Duration	Per cent. of possible	Duration	Per cent. of possible
	hr.	%	hr.	%	hr.	%	hr.	%	hr.	%	hr.	%	hr.	%	hr.	%	hr.	%	hr.	%	hr.	%	hr.	%
1	1·6	24	···	···	4·2	40	6·2	48	11·2	73	2·0	11	7·8	44	4·7	29	4·7	34	4·4	38	5·3	58	4·5	63
2	···	···	···	···	···	···	2·2	17	12·4	80	2·0	11	11·9	67	1·3	8	9·1	65	1·0	9	*7·1*	79	3·7	52
3	···	···	···	···	···	···	···	···	0·5	3	5·8	33	0·9	5	0·6	4	1·4	10	···	···	5·6	63	3·5	50
4	···	···	0·3	4	···	···	6·4	48	9·8	63	10·0	57	6·8	38	1·6	10	8·8	64	···	···	*7·1*	*81*	···	···
5	2·9	43	1·9	22	0·1	1	0·3	2	···	···	7·2	41	*13·3*	*76*	0·5	3	7·8	57	6·4	57	···	···	···	···
6	0·5	7	0·1	1	···	···	2·6	19	5·7	36	8·0	45	12·3	70	···	···	9·5	70	4·0	36	···	···	0·1	1
7	2·5	36	2·8	32	···	···	8·7	64	8·4	53	10·1	57	8·2	47	5·7	36	···	···	1·8	16	3·4	40	···	···
8	0·2	3	···	···	0·3	3	···	···	*14·1*	*89*	3·5	20	2·9	17	0·5	3	9·2	69	7·1	65	3·8	45	···	···
9	2·1	30	0·1	1	8·5	*76*	2·2	16	*14·1*	88	4·9	28	2·2	13	7·6	48	9·1	68	···	···	···	···	0·4	6
10	1·9	27	0·6	7	0·7	6	5·8	42	9·0	56	8·8	50	···	···	···	···	0·6	5	3·6	33	···	···	···	···
11	···	···	···	···	6·3	56	3·5	25	4·6	29	0·3	2	10·4	60	0·9	6	···	···	4·5	42	2·0	24	···	···
12	···	···	0·1	1	1·8	16	2·7	19	0·2	1	2·0	11	8·0	46	1·2	8	5·3	41	0·5	5	3·7	45	*5·0*	*75*
13	···	···	5·1	55	···	···	···	···	9·5	58	1·9	11	3·7	21	0·6	4	2·2	17	6·6	52	0·3	4	···	···
14	*4·6*	*64*	1·4	15	1·1	9	0·6	4	12·8	79	···	···	1·4	8	6·1	40	···	···	3·0	29	3·0	37	1·2	18
15	···	···	6·1	65	2·2	19	11·5	81	4·8	29	0·1	1	5·2	30	1·0	7	6·9	54	*9·1*	*87*	3·3	26	···	···
16	···	···	5·9	62	2·2	19	11·4	80	1·8	11	*11·1*	*62*	0·5	3	8·5	56	3·5	28	3·9	38	1·6	20	···	···
17	···	···	0·7	7	3·0	25	11·8	83	7·0	42	7·6	43	4·8	28	1·2	8	6·4	50	···	···	2·4	30	···	···
18	···	···	···	···	···	···	12·1	84	3·0	18	1·8	10	2·2	13	0·3	2	2·9	23	···	···	···	···	0·8	12
19	···	···	6·0	62	···	···	5·7	39	9·0	54	0·2	1	3·4	20	4·1	28	5·7	46	···	···	4·7	60	···	···
20	···	···	···	···	···	···	3·9	27	13·3	80	2·2	12	3·8	22	8·0	54	···	···	···	···	1·3	17	···	···
21	···	···	···	···	0·7	6	10·7	73	9·1	54	···	···	1·5	9	5·0	34	1·2	10	6·6	67	2·4	31	2·5	38
22	···	···	0·7	7	7·3	60	1·7	12	6·4	38	3·0	17	···	···	1·8	12	2·4	20	2·1	21	0·1	1	0·8	12
23	···	···	6·5	65	5·5	45	5·0	34	···	···	10·7	60	3·6	21	1·3	9	7·3	60	5·1	52	···	···	···	···
24	···	···	7·9	78	*8·7*	70	9·0	60	2·8	16	3·8	21	2·7	16	11·3	78	5·6	46	5·0	52	···	···	···	···
25	···	···	7·7	75	5·9	47	12·6	84	1·2	7	7·5	42	11·1	66	···	···	5·1	43	0·3	3	0·2	3	3·0	45
26	···	···	7·2	70	4·2	33	13·8	*92*	9·6	56	1·6	9	4·8	29	3·1	22	*10·6*	*89*	0·9	9	0·6	8	0·1	2
27	···	···	0·1	1	1·0	8	13·8	91	6·5	37	···	···	5·5	33	*11·6*	*81*	8·4	71	3·7	39	0·4	5	2·5	38
28	1·4	17	*9·4*	*90*	0·9	7	13·8	91	9·2	53	6·2	35	4·7	28	9·5	67	1·7	14	6·4	68	···	···	0·2	3
29	···	···			6·8	53	13·7	90	4·6	27	3·9	22	4·8	29	···	···	2·9	25	···	···	2·4	33	1·6	24
30	···	···			0·3	2	*13·9*	91	4·8	28	3·7	21	6·1	37	2·3	16	···	···	5·3	58	···	···	···	···
31	0·4	5			···	···			0·6	3			2·3	14	0·7	5			3·7	41			1·0	15
Mean	0·58	–	2·52	–	2·31	–	6·85	–	6·65	–	4·33	–	5·05	–	3·26	–	4·61	–	3·06	–	2·02	–	1·00	–
											Annual mean		3·52	–										

DURATION OF BRIGHT SUNSHINE

Monthly and annual totals between exact hours, local apparent time

74 ABERDEEN: h_s = 20·7 m. 1942

	Hour L.A.T. 3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	Total	per cent. of possible
	hours																			%
Jan.	–	–	–	–	···	···	···	3·5	*5·3*	4·1	3·5	1·7	···	···	–	–	–	–	18·1	8
Feb.	–	–	–	···	0·6	3·8	6·2	8·9	10·3	9·8	*10·8*	*10·8*	7·5	1·9	···	–	–	–	70·6	27
Mar.	–	–	···	0·8	2·9	5·4	8·5	8·5	*9·7*	7·9	7·6	8·1	7·1	4·7	0·5	···	–	–	71·7	20
Apr.	–	···	5·0	10·5	13·7	15·1	15·6	15·8	16·4	18·8	*20·4*	17·6	17·5	17·8	13·9	7·3	0·2	–	205·6	48
May	···	2·1	7·8	10·4	13·3	16·3	*19·9*	19·6	16·8	15·8	16·4	14·3	13·6	12·7	12·9	9·9	3·2	···	206·0	40
June	0·8	5·8	8·7	8·7	*10·5*	9·6	9·4	9·6	8·9	9·0	10·2	8·9	10·2	7·7	5·1	3·3	3·5	···	129·9	24
July	0·2	4·8	7·6	9·8	10·3	12·4	12·5	12·9	*13·4*	12·8	10·2	11·0	8·6	9·2	9·1	7·8	4·2	···	156·8	30
Aug.	···	···	2·5	4·7	5·9	8·3	8·4	8·5	9·9	*10·1*	9·6	9·5	8·5	7·6	5·9	1·6	···	···	101·0	22
Sept.	–	–	0·1	5·5	9·8	11·3	10·9	14·6	14·4	14·2	14·6	14·5	*15·1*	10·2	2·8	0·3	–	–	138·3	36
Oct.	–	–	–	–	3·5	7·7	12·3	*13·6*	12·9	13·4	12·9	10·0	5·9	2·8	–	–	–	–	95·0	30
Nov.	–	–	–	–	···	2·8	5·8	9·7	11·1	*11·9*	9·7	6·7	3·0	···	–	–	–	–	60·7	25
Dec.	–	–	–	–	–	···	2·5	6·1	7·1	*7·5*	5·7	2·0	···	–	–	–	–	–	30·9	15
Annual	1·0	12·7	31·7	50·4	70·5	92·7	112·0	131·3	136·2	*136·3*	131·6	115·1	97·0	74·6	50·2	30·2	11·1	···	1284·6	29

Mean speed and highest instantaneous speed recorded each day (0h. to 24h., G.M.T.) by the pressure-tube anemograph

75 ABERDEEN: h_a (height of anemograph above M.S.L.) = height of ground above M.S.L. + height of anemograph above ground = 24 m. + 13 m. 1942

	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER	
	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust
	metres per second																							
1	2·2	19	4·9	17	2·2	7	4·0	18	4·8	12	3·9	15	3·3	11	*1·2*	5	3·5	13	2·6	11	3·9	11	6·0	18
2	1·8	12	6·8	20	6·3	18	4·3	*25*	3·9	11	3·7	13	4·1	15	2·1	11	2·9	11	2·2	9	1·9	5	4·5	15
3	3·2	14	6·0	19	6·4	17	4·0	13	3·6	11	2·6	11	4·1	13	4·2	12	5·3	19	3·2	15	1·3	4	2·6	7
4	4·9	16	3·8	13	*8·4*	19	3·4	13	2·4	9	*1·6*	9	4·2	15	3·6	11	5·4	20	2·9	16	1·5	5	2·6	13
5	4·7	12	3·4	10	7·6	18	3·7	15	4·0	15	2·1	8	4·1	13	3·2	10	4·7	19	3·8	19	*1·2*	6	4·5	16
6	4·5	13	2·3	10	8·3	*19*	3·3	12	*6·2*	*19*	2·6	12	3·5	16	2·2	7	3·5	20	3·1	19	4·4	*20*	2·5	10
7	3·4	10	2·2	8	2·5	12	2·7	12	4·1	15	6·2	20	3·7	13	2·5	8	2·5	10	4·2	17	3·0	11	4·1	27
8	4·4	18	1·7	8	2·5	14	2·1	11	2·6	7	*7·7*	*21*	2·6	10	4·0	19	2·0	12	2·9	13	2·2	7	3·6	24
9	4·5	19	2·5	11	4·0	12	1·6	9	2·2	9	7·1	18	2·0	9	2·4	10	3·4	15	4·5	19	2·6	11	6·3	20
10	1·8	7	3·5	15	2·6	7	4·2	21	3·2	11	4·9	14	1·9	6	4·7	16	3·2	17	2·9	18	3·4	11	5·9	19
11	2·1	9	4·5	16	2·5	10	2·3	12	3·9	11	2·4	9	4·7	14	2·8	10	1·5	9	2·2	13	3·7	16	3·4	17
12	5·8	21	5·9	*22*	5·2	17	4·3	17	4·9	13	3·2	11	3·1	10	4·5	10	*1·3*	5	2·3	9	3·6	14	2·2	8
13	3·5	20	*8·3*	22	6·8	17	*4·8*	14	3·5	11	2·8	9	1·6	8	1·8	6	2·9	10	1·8	11	1·7	8	6·5	22
14	1·5	7	3·0	12	3·7	12	3·7	11	3·7	8	3·8	11	1·8	8	2·5	9	4·5	16	5·7	22	2·4	13	3·5	11
15	7·9	21	0·8	4	2·3	8	2·6	11	4·0	14	4·3	13	4·1	13	3·7	15	5·6	*24*	*6·7*	*24*	4·4	19	5·5	18
16	8·7	21	1·8	9	2·4	9	2·0	12	4·3	12	2·8	8	2·6	10	3·9	17	*6·1*	23	4·9	16	*6·0*	19	8·0	24
17	4·6	14	1·0	4	2·1	10	1·5	8	3·0	13	2·2	11	*7·2*	*19*	*6·1*	22	3·9	15	1·3	14	3·1	12	4·9	16
18	4·0	13	*0·7*	3	1·8	9	1·3	6	3·1	10	3·7	11	6·1	17	4·3	16	2·3	13	2·8	10	4·9	17	2·0	6
19	9·0	26	1·6	5	2·2	8	1·8	9	3·1	11	2·8	9	1·5	9	3·1	13	3·4	15	*0·9*	7	2·4	13	3·2	13
20	4·7	16	1·4	10	2·1	9	2·1	7	3·1	10	2·5	7	3·2	14	4·3	16	4·2	15	2·3	14	3·4	12	4·1	18
21	8·4	23	3·4	12	*0·4*	3	2·5	11	4·6	13	3·2	9	2·1	8	4·8	15	2·7	12	2·1	9	3·9	13	5·9	17
22	7·1	15	2·0	9	1·3	7	*1·2*	7	3·3	13	2·2	13	1·7	7	2·7	9	2·3	13	3·3	16	4·4	15	5·2	19
23	5·5	16	1·5	5	0·8	5	2·7	10	3·4	14	3·1	11	3·5	15	2·0	7	2·2	9	2·5	13	3·6	11	4·1	18
24	6·9	22	1·6	5	1·7	14	2·5	9	3·6	12	4·5	12	3·5	15	2·0	7	3·3	16	2·5	9	3·1	11	4·7	18
25	*10·9*	*29*	1·6	7	5·4	19	2·5	9	5·1	17	2·9	11	4·6	17	2·9	11	4·1	17	1·4	9	2·2	7	2·3	13
26	3·7	(9)	4·1	11	2·4	8	2·8	8	5·3	14	2·6	10	2·0	6	1·3	6	3·0	11	3·4	18	3·2	10	3·7	17
27	4·4	17	5·9	19	2·3	12	2·5	8	4·7	15	2·9	11	2·0	7	1·6	9	3·9	14	2·8	11	3·8	17	*1·5*	8
28	*1·3*	7	4·3	15	3·9	11	3·6	9	4·3	14	2·4	9	2·6	9	1·2	9	4·2	17	1·7	11	4·4	15	5·4	27
29	3·1	13			3·9	11	3·5	13	3·2	10	3·0	13	*1·4*	8	2·5	10	3·1	11	5·6	17	3·9	13	*10·5*	*30*
30	1·8	10			2·4	9	1·8	8	*1·8*	7	2·8	10	1·8	8	3·7	12	2·3	9	5·2	18	3·2	11	5·1	21
31	2·2	9			3·0	11			2·2	8			1·9	9	2·4	11			3·9	13			5·3	20

WIND

Monthly and annual means of mean wind speed between exact hours, G.M.T.

76 ABERDEEN: h_a = 24 m. + 13 m. 1942

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	metres per second																								
Jan.	4·4	4·5	4·6	4·8	4·9	4·6	4·7	4·8	4·3	*4·3*	4·5	4·6	4·7	4·6	4·4	4·5	4·4	4·4	4·7	4·6	4·7	*4·9*	4·9	4·6	4·6
Feb.	3·4	3·4	3·2	3·2	2·8	2·8	2·9	*2·6*	2·8	3·0	3·2	3·6	3·8	*3·8*	3·7	3·6	3·5	3·2	3·1	3·2	3·0	3·3	3·4	3·3	3·2
Mar.	3·0	3·0	2·9	*2·8*	2·9	3·0	3·0	3·3	3·6	3·9	4·0	4·3	4·4	*4·4*	4·4	4·4	4·1	3·7	3·6	3·4	3·3	3·2	3·0	2·9	3·5
Apr.	2·4	2·3	2·4	2·4	2·1	2·2	2·5	2·6	2·9	3·2	3·7	3·9	4·1	*4·1*	3·9	3·7	3·7	3·2	2·7	2·2	*2·0*	*2·0*	2·0	2·3	2·8
May	2·7	2·9	2·9	3·0	3·1	3·1	3·6	3·9	4·0	4·6	4·8	*5·0*	5·0	4·9	4·7	4·6	4·4	4·0	3·6	3·1	2·8	2·7	*2·6*	2·7	3·7
June	2·6	2·5	2·5	2·4	*2·3*	2·7	3·2	3·7	3·8	4·1	4·2	4·5	4·3	4·4	4·3	*4·5*	4·3	4·0	3·6	3·4	2·8	2·7	2·7	2·8	3·4
July	2·3	2·2	*2·2*	2·4	2·5	2·5	2·7	2·9	3·2	3·6	3·9	4·0	4·1	4·1	4·2	*4·2*	4·0	3·7	3·4	2·9	2·6	2·6	2·3	2·3	3·1
Aug.	2·4	2·5	2·3	2·2	2·4	2·3	2·4	2·5	2·9	3·4	3·8	3·8	*4·1*	4·1	3·9	3·9	3·8	3·7	3·2	3·0	2·7	2·6	2·4	2·5	3·0
Sept.	2·7	2·8	3·2	3·0	3·0	3·0	3·1	3·4	3·8	4·2	4·7	*4·8*	4·7	4·7	4·6	4·3	3·8	3·0	2·7	*2·4*	2·7	2·7	2·5	2·7	3·4
Oct.	3·1	3·2	3·1	3·1	3·1	2·9	2·8	2·8	2·9	3·1	3·5	3·8	*3·9*	3·8	3·6	3·3	2·9	*2·7*	2·7	2·9	2·8	3·1	3·0	3·1	3·1
Nov.	2·8	*2·8*	3·0	3·0	3·0	3·2	3·1	3·1	3·1	3·1	3·4	3·6	*3·7*	3·4	3·4	3·4	3·2	3·1	3·4	3·3	3·5	3·4	3·2	3·0	3·2
Dec.	4·7	4·4	4·5	4·6	4·6	4·3	4·2	4·0	*3·9*	4·3	4·5	4·5	4·9	*5·0*	4·9	4·7	4·6	4·6	4·5	4·4	4·6	4·3	4·5	4·6	4·5
Annual	3·1	*3·0*	3·1	3·1	3·1	3·1	3·2	3·3	3·4	3·7	4·0	4·2	*4·3*	4·3	4·2	4·1	3·9	3·6	3·4	3·2	3·1	3·1	3·0	3·1	3·5

DISTRIBUTION OF WIND SPEED, EXTREME VELOCITIES AS RECORDED BY PRESSURE-TUBE ANEMOGRAPH

77 ABERDEEN: h_a = 24 m. + 13 m. 1942

	DISTRIBUTION OF WIND SPEED								EXTREME VELOCITIES				
	More than 17·1 m./sec.		10·8 to 17·1 m./sec.		5·5 to 10·7 m./sec.	1·6 to 5·4 m./sec.	Less than 1·6 m./sec.	No record	Highest hourly wind			Highest gust	
	Dates of occurrence	Duration	No. of days	Duration	Duration	Duration	Duration	Duration	Veer from N.	Speed	Hour ended	Speed	Date
		hr.		hr.	hr.	hr.	hr.	hr.	°	m./sec.	day h.	m./sec.	day h. m.
Jan.	–	0	3	(14)	(230)	395	105	0	150	13	25 11	29	25 10 45
Feb.	–	0	2	3	98	366	205	0	310	12	13 1	22	12 22 15
Mar.	–	0	–	0	169	401	174	0	130	10	4 12	19	6 9 55
Apr.	–	0	1	1	58	458	203	0	320	11	2 1	25	2 0 40
May	–	0	–	0	119	546	79	0	280	9	6 16	19	6 12 15
June	–	0	–	0	87	521	112	0	290 310	10	7 13 8 10	21	8 10 20
July	–	0	–	0	103	463	178	0	350	9	17 17	19	17 17 15
Aug.	–	0	–	0	58	532	154	0	180	10	8 13	22	17 13 15
Sept.	–	0	1	1	104	500	115	0	290	11	15 11	24	15 11 5
Oct.	–	0	–	0	111	470	163	0	260	11	15 14	24	15 13 15
Nov.	–	0	–	0	83	518	119	0	310	9	22 20	20	6 19 30
Dec.	–	0	4	10	251	402	81	0	320	15	29 3	30	29 1 50
Year	–	0	11	(29)	(1471)	5572	1688	0	320	15	Dec. 29 3	30	29 1 50

TEMPERATURE IN THE GROUND AT DEPTHS OF 30 CM. (1ft.) AND 122 CM. (4ft.) AT 9h., G.M.T.

78 ABERDEEN 1942

	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER	
	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.
	degrees Absolute																							
1	76·3	78·6	74·6	76·8	74·1	75·8	77·9	77·4	81·3	79·8	83·7	82·1	86·6	84·1	87·2	85·3	87·6	86·1	84·1	84·6	80·2	82·5	77·6	80·2
2	76·0	78·5	74·6	76·8	74·1	75·8	78·3	77·4	81·5	79·9	83·8	82·2	86·7	84·1	87·8	85·3	87·7	86·2	84·1	84·5	79·9	82·4	77·1	80·0
3	76·7	78·5	74·5	76·7	74·1	75·8	78·0	77·4	81·9	79·9	84·4	82·2	86·8	84·2	87·6	85·5	87·6	86·1	83·9	84·4	79·3	82·3	76·8	80·0
4	77·4	78·5	74·5	76·6	74·3	75·8	77·6	77·5	81·4	80·1	85·6	82·3	86·8	84·3	87·0	85·6	87·2	86·1	83·9	84·5	78·5	82·2	76·5	79·7
5	75·8	78·4	74·5	76·6	74·3	75·8	78·2	77·6	82·1	80·2	86·0	82·4	86·8	84·4	86·7	85·6	87·0	86·2	84·1	84·4	77·9	81·9	76·6	79·6
6	75·8	78·4	74·5	76·4	74·1	75·8	78·4	77·7	81·9	80·2	86·0	82·7	86·9	84·6	86·6	85·6	86·9	86·1	83·6	84·4	77·8	81·7	76·3	79·6
7	76·1	78·4	74·5	76·4	74·1	75·7	78·6	77·7	82·4	80·3	86·2	82·9	87·1	84·6	86·6	85·6	86·5	86·1	83·6	84·4	78·6	81·4	77·4	79·4
8	76·1	78·4	74·5	76·3	74·0	75·7	79·1	77·8	81·8	80·3	85·4	83·0	87·1	84·7	87·1	85·5	85·4	86·2	83·6	84·2	78·5	81·3	78·2	79·2
9	76·0	78·3	74·5	76·3	74·0	75·8	79·3	77·9	81·8	80·6	84·6	83·0	86·8	84·6	87·2	85·6	87·3	85·9	83·2	84·2	78·6	81·2	78·4	79·2
10	75·7	78·2	74·6	76·3	74·1	75·7	78·4	78·1	82·3	80·7	84·9	83·2	86·9	84·7	87·7	85·6	86·8	85·9	82·9	84·1	79·2	81·2	79·0	79·2
11	75·4	78·2	74·4	76·2	74·0	75·7	78·4	78·1	82·5	80·7	84·3	83·2	86·6	84·7	87·2	85·5	86·3	86·1	82·6	84·1	79·2	80·9	79·3	79·4
12	75·2	78·0	74·5	76·2	74·2	75·7	79·1	78·3	82·5	80·7	84·1	83·1	86·7	84·8	87·4	85·7	86·0	85·9	82·2	84·0	79·1	81·0	78·9	79·5
13	75·2	78·0	74·5	76·2	74·1	75·7	79·3	78·3	82·2	80·8	83·9	83·1	87·1	84·8	87·4	85·7	85·7	85·8	81·8	83·9	78·8	80·8	78·2	79·5
14	75·0	77·9	74·4	76·1	74·2	75·7	79·0	78·4	82·1	80·8	84·2	83·1	87·5	84·8	87·5	85·8	85·7	85·8	82·0	83·7	78·8	80·8	78·5	79·4
15	75·0	77·7	74·4	76·1	74·9	75·7	78·6	78·4	82·6	80·9	83·9	83·0	87·2	84·9	87·3	85·7	85·6	85·8	82·7	83·6	79·1	80·8	78·6	79·4
16	74·9	77·6	74·3	76·1	75·9	75·7	79·2	78·4	82·8	80·9	84·0	83·1	87·1	84·9	87·2	85·8	85·2	85·8	82·4	83·6	79·1	80·7	79·0	79·5
17	75·1	77·5	74·2	75·1	76·7	75·7	80·1	78·6	82·7	81·0	84·1	83·1	87·2	85·1	87·3	85·8	85·1	85·8	82·4	83·5	78·9	80·7	79·2	79·4
18	75·1	77·4	74·2	76·0	77·4	75·8	79·8	78·6	83·2	81·1	85·1	83·1	86·9	85·1	87·4	85·8	85·0	85·6	82·3	83·5	79·0	80·7	79·5	79·6
19	75·4	77·4	74·2	76·0	77·0	76·1	80·1	78·6	83·1	81·2	84·9	83·1	86·7	85·2	87·3	85·8	84·9	85·4	82·5	83·3	78·8	80·6	78·9	79·7
20	75·3	77·4	74·1	76·0	76·5	76·3	80·4	78·7	83·2	81·3	84·8	83·3	86·9	85·2	87·5	85·8	85·1	85·4	82·3	83·3	78·6	80·5	78·6	79·6
21	75·2	77·3	74·1	75·9	76·3	76·3	80·4	79·0	83·1	81·3	85·2	83·4	87·1	85·2	87·4	85·8	85·1	85·3	82·3	83·2	78·5	80·5	78·6	79·6
22	75·1	77·3	74·1	75·8	77·2	76·4	80·6	79·1	83·7	81·4	85·5	83·5	87·3	85·2	87·2	85·8	85·2	85·2	82·3	83·3	78·0	80·4	78·9	79·6
23	75·1	77·3	74·1	75·9	77·5	76·6	80·4	79·2	83·6	81·6	85·9	83·5	87·2	85·2	87·4	85·8	85·0	85·2	82·3	83·2	77·9	80·2	78·6	79·6
24	75·3	77·1	74·1	75·8	77·8	76·8	80·2	79·2	83·4	81·7	86·3	83·5	87·0	85·2	87·2	85·8	84·6	85·2	81·9	83·1	78·5	80·2	78·7	79·6
25	75·4	77·0	74·1	75·9	78·2	76·8	80·5	79·4	83·4	81·7	85·9	83·6	86·8	85·3	87·2	85·8	84·1	85·2	81·6	83·0	78·9	80·2	78·7	79·6
26	75·1	76·9	74·1	75·8	77·8	76·9	80·8	79·4	83·0	81·8	86·1	83·7	86·9	85·3	87·2	85·8	83·6	85·1	81·3	83·0	79·0	80·2	77·9	79·6
27	74·9	77·0	74·1	75·8	77·6	77·1	80·8	79·5	83·2	81·9	85·9	83·9	86·8	85·3	87·6	85·9	83·1	84·9	81·3	82·9	79·1	80·2	78·1	79·6
28	74·8	76·9	74·2	75·8	77·3	77·2	81·1	79·6	83·3	81·8	85·9	83·9	86·7	85·3	88·1	85·8	83·4	84·8	81·1	82·9	79·0	80·2	77·7	79·4
29	74·7	76·9			77·0	77·3	81·2	79·7	83·7	81·9	86·2	84·1	86·6	85·4	88·3	85·9	83·9	84·7	81·2	82·7	78·5	80·1	77·6	79·4
30	74·6	76·9			77·3	77·3	81·1	79·7	83·9	82·0	86·5	84·1	86·8	85·3	88·7	86·1	84·1	84·7	81·2	82·6	77·9	80·2	77·1	79·3
31	74·7	76·8			77·7	77·3			83·8	81·9			86·9	85·3	87·6	86·1			80·6	82·6			76·8	79·2
Mean	75·4	77·7	74·3	76·2	75·7	76·2	79·5	78·5	82·7	81·0	85·1	83·1	86·9	84·9	87·4	85·7	85·6	85·6	82·5	83·6	78·8	80·9	78·1	79·5
											Year		81·0	81·1										

MINIMUM TEMPERATURE "ON THE GRASS" DURING THE INTERVAL 18h. TO 7h., G.M.T.

79 ABERDEEN 1942

	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
	degrees Absolute											
1	70·3	70·8	67·9	73·1	71·9	73·0	77·5	82·3	85·5	79·6	75·1	72·1
2	71·6	72·8	72·0	75·7	75·2	82·4	80·1	80·8	82·2	75·5	71·7	68·6
3	78·1	72·8	75·2	*68·2*	74·5	83·7	82·4	81·5	83·1	77·0	67·9	*67·8*
4	74·8	72·7	75·3	76·4	71·9	82·3	84·1	80·8	79·1	81·5	*67·1*	67·8
5	68·7	69·6	68·8	77·0	77·9	79·7	77·1	80·2	83·9	77·8	69·7	76·2
6	68·6	69·9	69·2	75·2	81·8	82·4	76·9	83·3	76·9	77·4	73·3	72·9
7	72·9	71·9	71·0	76·8	74·2	75·2	81·8	81·8	78·6	80·4	74·0	78·0
8	71·2	72·7	*64·7*	73·9	69·0	76·8	*75·2*	84·2	84·3	78·6	70·8	78·1
9	72·2	71·2	71·3	70·5	*68·0*	77·8	81·8	84·6	82·7	74·2	78·2	79·6
10	69·9	73·0	71·3	72·1	75·8	75·7	78·7	83·0	77·2	72·4	78·9	77·6
11	67·3	67·7	71·0	69·7	73·4	71·9	78·0	85·1	78·6	*70·8*	69·7	78·6
12	71·7	74·6	66·8	77·2	77·5	76·0	79·7	84·8	76·4	74·2	78·6	72·9
13	74·1	69·2	73·2	76·3	75·4	78·9	81·9	84·1	74·7	72·6	70·1	71·6
14	71·4	69·3	74·5	76·7	69·8	79·2	81·1	78·6	82·6	78·6	77·7	77·8
15	71·5	68·6	75·6	72·3	78·2	79·6	80·6	78·2	79·6	79·4	73·5	77·8
16	74·1	68·1	75·5	71·3	79·4	75·0	83·9	82·4	78·0	78·2	75·2	78·6
17	74·6	69·4	78·3	72·9	78·8	*71·4*	83·1	84·3	80·9	78·6	73·9	79·8
18	72·6	72·9	73·9	69·6	79·8	77·8	82·7	85·6	76·8	79·7	78·9	77·9
19	75·0	66·4	74·3	71·4	76·9	73·8	80·3	83·0	75·3	80·9	70·6	74·4
20	71·9	72·4	73·5	74·2	76·4	80·9	83·8	81·1	81·5	79·3	76·5	71·6
21	72·2	73·4	72·8	72·9	77·9	81·9	80·9	83·1	83·3	71·9	71·4	79·9
22	71·4	70·4	75·2	72·2	77·1	83·9	84·7	83·0	77·4	80·3	72·9	81·3
23	71·4	66·4	71·3	76·8	77·1	75·0	83·1	83·3	75·7	76·5	76·9	68·9
24	75·4	68·4	70·9	71·3	80·8	82·3	81·0	*76·2*	74·6	76·3	78·3	81·7
25	72·6	*65·2*	75·2	76·0	78·2	76·2	77·4	81·8	72·4	75·2	77·2	71·7
26	68·9	69·4	71·4	74·0	76·9	75·2	81·0	85·8	72·6	72·9	76·3	73·2
27	68·4	71·8	71·3	74·0	77·9	81·9	75·9	82·3	*68·7*	73·4	76·9	69·7
28	68·3	72·6	72·6	75·3	79·1	81·4	76·2	77·7	81·1	72·0	75·2	74·1
29	*67·0*		73·5	76·1	78·4	79·2	79·3	82·6	80·8	79·4	74·6	72·9
30	72·6		75·5	70·8	77·3	82·9	77·4	81·9	79·0	76·0	71·0	69·7
31	69·6		75·3		79·3		77·1	84·8		73·0		72·6
Mean	71·6	70·5	72·5	73·7	76·3	78·4	80·2	82·3	78·8	76·6	74·1	74·7
						Year	75·8					

The initial 2 or 3 of the readings is omitted, i.e. 275·0 degrees is printed 75·0

The minimum "on the grass" refers to the interval from 18h. on the previous day to 7h. on the day to which it is entered.

Add 0·16° to obtain temperature in degrees Kelvin where $T(°K.) = t(°C.) + 273·16$.

ESKDALEMUIR

ESKDALEMUIR OBSERVATORY

Latitude	55°19′ N.
Longitude	3°12′ W.
G.M.T. of Local Mean Noon	12h. 13m.

Heights of instruments	above M.S.L.	above ground
	m.	m.
Barometer	237·3	..
Thermometer bulbs	..	0·9
Rain-gauge	242·0	..
Beckley rain-gauge rim	..	0·4
Sunshine recorder	..	1·5
Pressure-tube anemograph	250	15

INTRODUCTION

No changes of site or in the meteorological instruments occurred except that in September 1940 the Beckley self-registering rain-gauge was replaced by a Dines tilting syphon rain recorder. Reference should be made to the 1938 volume for details.

NOTES ON THE METEOROLOGICAL SUMMARIES

The extreme temperatures recorded during the year were 298·3°A. (77·5°F.) on June 5 and 262·1°A. (12·4°F.) on February 26. December 3 with a mean temperature of 266·6°A. (20·5°F.) was the coldest day of the year and June 5 with 290·3°A. (63·1°F.) was the hottest. There were 11 ice days, i.e. days with maximum temperature below 273°A.; 7 of these occurred in January, 2 in February and 2 in March.

The total rainfall for the year 1504·4 mm. (59·23 in.) was slightly below normal. Snow fell on 54 days.

The total duration of bright sunshine, 1261·5 hr., was above the normal.

The highest gust of wind during the year was 34·4 m./sec. (77 m.p.h.) and was recorded on December 10; the highest hourly speed 19·7 m./sec. (44 m.p.h.), also occurred on December 10.

The results of the harmonic analysis of the diurnal inequalities of pressure are set out in the accompanying table. For purposes of comparison the corresponding data are also given, derived from the mean inequalities for the period 1911–20 by Dr. A. Crichton Mitchell*.

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* MITCHELL, A. CRICHTON: On the diurnal variation of atmospheric pressure at Eskdalemuir and Castle O'er, Dumfriesshire. *Quart. J.R. met. Soc., London*, 50, 1924, p. 127.

HARMONIC COEFFICIENTS OF THE DIURNAL INEQUALITY OF ATMOSPHERIC PRESSURE
ESKDALEMUIR, LONGITUDE 3°12′W.

Values of c_n, α_n in the series $\Sigma c_n \sin(15nt + \alpha_n)$, t being local mean time reckoned in hours from midnight

	c_1		α_1		c_2		α_2		c_3		α_3		c_4		α_4	
	1942	1911-1920	1942	1911-1920	1942	1911-1920	1942	1911-1920	1942	1911-1920	1942	1911-1920	1942	1911-1920	1942	1911-1920
	mb.	mb.	°	°	mb.	mb.	°	°	mb.	mb.	°	°	mb.	mb.	°	°
January	0.44	0.09	351	346	0.21	0.23	164	152	0.10	0.13	353	345	0.06	0.05	218	214
February	0.17	0.12	159	215	0.31	0.27	147	138	0.08	0.08	8	341	0.02	0.04	61	68
March	0.15	0.13	85	185	0.40	0.30	149	145	0.04	0.05	341	335	0.07	0.05	33	25
April	0.35	0.21	14	92	0.27	0.30	149	155	0.05	0.02	186	156	0.07	0.05	6	356
May	0.20	0.23	162	53	0.20	0.27	136	147	0.05	0.07	162	160	0.06	0.03	349	330
June	0.17	0.15	59	54	0.23	0.23	152	146	0.08	0.08	149	161	0.02	0.02	15	326
July	0.04	0.17	142	69	0.17	0.21	138	141	0.09	0.08	153	156	0.01	0.02	49	300
August	0.14	0.11	109	115	0.24	0.24	137	148	0.06	0.06	161	157	0.05	0.05	340	331
September	0.33	0.12	200	88	0.28	0.31	168	152	0.03	0.01	358	111	0.06	0.05	6	345
October	0.21	0.11	207	76	0.23	0.31	162	159	0.07	0.06	348	8	0.03	0.04	53	33
November	0.23	0.13	319	183	0.27	0.24	163	168	0.10	0.10	1	9	0.04	0.01	143	146
December	0.39	0.14	259	97	0.21	0.21	221	147	0.09	0.12	348	4	0.06	0.07	204	213
Arithmetic mean	0.23	0.14			0.25	0.26			0.07	0.07			0.05	0.04		
Year	0.01	0.09	284	91	0.24	0.26	156	150	0.02	0.02	16	42	0.02	0.02	10	342
Winter	0.17	0.04	305	165	0.22	0.24	170	151	0.09	0.11	357	355	0.03	0.02	191	189
Equinox	0.04	0.11	171	104	0.29	0.31	156	153	0.03	0.02	341	4	0.05	0.04	20	9
Summer	0.10	0.15	118	67	0.21	0.24	141	146	0.07	0.07	155	159	0.03	0.03	355	324

"Winter" comprises the four months January, February, November, December; "Equinox" the months March, April, September, October; and "Summer" May to August.

ATMOSPHERIC ELECTRICITY

The disposition of the instruments and the arrangement of the tables recording the result remain substantially the same as described in the 1938 volume. Wulf quartz-thread electrometer (N.3040) was calibrated in July. No material change had taken place since the previous calibration in June 1941.

TERRESTRIAL MAGNETISM

Reference should be made to the 1938 volume for notes on the instruments and tables.

NOTES ON THE RESULTS

Comparing mean values on all days of 1942 with those for 1941 it is noted that H increased by 10γ, D(west) decreased by 8·4′ and V increased by 2γ. The changes in the deduced quantites N, W, I and T are +19γ, −37γ, −0·6′, +5γ. If these changes are compared with those for previous years the discontinuities introduced on January 1, 1934 in H and V and the components derived from them must be kept in mind.

The ranges between the extreme values recorded during 1942 were H, 656γ; D, 2°3·5′; V, 641γ. The ranges of 2°3·5′ in declination is equivalent to a range of about 594γ in the component of force perpendicular to the magnetic meridian.

Table I summarizes the magnetic character figures assigned locally and the international mean character figures. At the assembly of the association of Terrestrial Magnetism and Electricity at Washington in September 1939, a new measure of magnetic disturbance, the K index, was agreed upon. Measurements of K are now given in this volume replacing the former measure $(HR_H + VR_V)10^{-4}$ in accordance with the I.A.T.M.E. circular letter dated January 20, 1940. The K index is fully described in Terrestrial Magnetism and Atmospheric Electricity*. Briefly a figure is allotted, on a scale 0–9, to each

* BARTELS, J., HECK, N. H. AND JOHNSTON, H. F.; The three-hour-range index measuring geomagnetic activity. *Terr. Magn. atmos. Elect. Baltimore, Ma*, **44**, 1939, p. 411.

3-hr. interval. The figure is a measure of the range of magnetic force during that period, measured from a curved line which represents the normal quiet-day variation. The figures are first allotted from the H magnetogram and then increased, if necessary, by inspection of the D and V curves, so that the most disturbed component determines the final figure. The scale of ranges in γ corresponding to the figures 0-9 varies from observatory to observatory. The lower limit of each number for Eskdalemuir is

K	0	1	2	3	4	5	6	7	8	9
Range in γ	0	8	15	30	60	105	180	300	500	750

Table I has been slightly changed in form from previous years owing to the omission of $(HR_H + VR_V)10^{-4}$. K figures and their sums have been given for each day in the main tables but as it is considered that monthly means of K figures are not a good measure of activity they are not included.

TABLE I

	Magnetic character figures			Mean character figures	
	Number of 0 days	1 days	2 days	Eskdalemuir	International
January	18	13	0	0·42	0·53
February	14	12	2	0·57	0·62
March	5	20	6	1·03	0·88
April	10	16	4	0·80	0·71
May	18	13	0	0·42	0·39
June	15	15	0	0·50	0·47
July	11	19	1	0·68	0·65
August	11	20	0	0·65	0·65
September	12	15	3	0·70	0·71
October	8	18	5	0·90	0·85
November	10	19	1	0·70	0·69
December	19	11	1	0·42	0·55
Year					
1942	151	191	23	0·65	0·64
1941	172	168	25	0·60	0·73
1940	156	184	26	0·65	0·72
1939	167	172	26	0·61	0·77
1938	183	135	47	0·63	0·76
1937	116	205	44	0·81	0·73
1936	144	198	24	0·67	0·65
1935	130	212	23	0·71	0·67
1934	167	178	20	0·60	0·56
1933	156	175	34	0·67	0·64
1932	126	208	32	0·74	0·71

The values of mean absolute daily range for the months and seasons are brought together in Table II where for convenience of comparison the ranges of declination in angle have been converted to units of force of the component perpendicular to the magnetic meridian.

The frequency distribution of absolute daily ranges recorded in 1942 is shown in Table III which contains also the percentage distribution for 1942 and for the period 1932–1942.

TABLE II — ABSOLUTE DAILY RANGE AND MEAN MONTHLY VALUES

	Mean absolute daily range						Mean daily range expressed as percentage of yearly mean					
	1942			Mean 1932–42			1942			Mean 1932–42		
	H	D	V	H	D	V	H	D	V	H	D	V
	γ	γ	γ	γ	γ	γ	%	%	%	%	%	%
January	55	65	30	78	79	44	60	74	50	81	91	76
February	73	84	51	76	86	50	80	96	85	79	99	88
March	129	120	88	122	113	82	142	136	147	127	130	144
April	116	107	92	125	103	79	127	122	153	130	108	139
May	81	71	45	111	86	66	89	81	75	116	99	116
June	81	73	44	100	81	50	89	83	73	104	93	88
July	99	78	55	106	82	53	109	89	92	110	94	93
August	95	84	53	102	85	57	104	95	88	106	98	100
September	102	88	65	102	95	64	112	100	108	106	109	112
October	117	118	99	97	94	65	129	134	165	101	108	114
November	82	89	54	67	75	41	90	101	90	70	86	72
December	66	74	44	61	69	40	73	84	73	64	79	70
Winter	69	78	45	70	77	44	76	89	75	73	88	77
Equinox	116	108	86	111	101	72	127	123	143	116	116	126
Summer	89	77	49	105	84	57	98	87	82	109	97	100
Year	91	88	60	96	87	57	..	..	..	..	..	..

"Winter" comprises the four months January, February, November, December; "Equinox" the months March, April, September, October; and "Summer" May to August.

TABLE III — FREQUENCY DISTRIBUTION OF ABSOLUTE DAILY RANGE

Range	Number of cases, 1942			Percentage distribution					
	H	D	V	H 1942	H 1932–42	D 1942	D 1932–42	V 1942	V 1932–42
γ				%	%	%	%	%	%
0 – 9	0	0	4	0·0	0·0	0·0	0·0	1·1	3·0
10 – 19	1	1	48	0·3	1·0	0·3	0·4	13·2	15·8
20 – 29	17	8	66	4·7	4·2	2·2	2·9	18·1	22·1
30 – 39	21	20	63	5·8	6·6	5·5	5·7	17·3	16·8
40 – 49	22	24	37	6·0	8·7	6·6	8·0	10·1	9·5
50 – 59	48	55	28	13·2	11·3	15·1	13·2	7·6	6·9
60 – 69	48	64	24	13·2	13·2	17·1	14·0	6·6	5·1
70 – 79	41	40	15	11·2	10·6	11·0	12·5	4·1	3·4
80 – 89	29	26	18	7·9	9·3	7·1	10·3	4·9	2·7
90 – 99	24	20	13	6·6	6·9	5·5	7·8	3·6	2·3
100 – 109	24	20	5	6·6	5·2	5·5	5·3	1·4	1·8
110 – 119	15	18	7	4·1	4·5	4·9	3·8	1·9	1·4
120 – 129	17	19	8	4·7	2·9	5·2	3·3	2·2	1·4
130 – 139	12	9	0	3·3	2·7	2·5	2·5	0·0	0·9
140 – 149	5	4	2	1·4	1·8	1·1	1·8	0·5	0·8
150 – 159	7	10	2	1·9	1·9	2·7	1·6	0·5	0·4
160 – 169	6	4	4	1·6	1·3	1·1	1·4	1·1	0·5
170 – 179	4	5	2	1·1	1·0	1·4	0·8	0·5	0·2
180 – 189	4	1	1	1·1	0·8	0·3	0·8	0·3	0·5
190 – 199	2	4	3	0·5	0·6	1·1	0·7	0·8	0·4
200 +	18	13	15	4·9	5·2	3·6	3·1	4·1	4·0
Days omitted	0	0	0	..	..	..	..	..	..

The average values of the diurnal inequality ranges for the year and seasons for the period 1932–42 (not the values of the range of the representative mean diurnal inequalities for this period) are given in Table IV, along with the 1942 values expressed as a percentage of the average values. The units employed are 1γ for force and 1′ for declination.

TABLE IV - AVERAGE RANGE OF DIURNAL INEQUALITY 1932-42, WITH 1942 VALUE AS PERCENTAGE

		All days			International quiet days			International disturbed days		
		V	H	D	V	H	D	V	H	D
		γ	γ	′	γ	γ	′	γ	γ	′
Year	1932-42	25.4	36.9	8.54	12.8	33.6	8.17	71.7	52.1	11.47
	1942(%)	114	83	89	105	85	90	97	79	102
Winter	1932-42	19.5	18.5	6.70	5.6	15.7	4.23	61.0	28.8	10.95
	1942(%)	99	96	104	84	76	90	93	106	109
Equinox	1932-42	32.1	42.7	10.02	13.9	38.8	9.56	94.5	72.8	14.56
	1942(%)	140	84	88	118	95	98	114	70	84
Summer	1932-42	29.8	58.0	11.66	20.8	49.2	11.37	71.6	82.2	12.69
	1942(%)	98	82	89	102	82	84	73	73	99

"Winter" comprises the four months January, February, November, December; "Equinox" the months March, April, September, October; and "Summer" May to August.

Irregular changes in declination.– In connexion with the supply of declination data to mine surveyors it has been the practice to classify the hourly periods between the exact hours G.M.T. into four groups according to the range in declination within each period. The range limits which were adapted in consultation with representative mine surveyors, are: less than 5′, between 5′ and 15′, between 15′ and 30′, and greater than 30′. The range is less than 5′ in about 85 per cent. of the hourly periods. The actual frequencies of occurrence of hourly ranges in the last three of the four divisions mentioned are set out below. A range of 30′ is equivalent to a change of 144γ in the component of horizontal force perpendicular to the magnetic meridian.

Number of cases per month, 1942

Range interval	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
5–15′	55	66	144	101	40	40	97	89	141	177	94	96	1140
15–30′	3	9	20	10	3	0	6	8	12	29	19	8	127
>30′	0	2	12	3	0	0	0	1	0	8	1	0	27

Hourly distribution, 1942

Range interval	Hour (G.M.T.) ending at																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
5–15′	78	65	50	40	41	34	29	28	22	27	30	29	37	25	38	37	51	56	63	67	70	81	73	69
15–30′	7	10	3	2	2	0	1	2	0	0	1	0	0	0	2	10	10	17	11	13	13	6	11	6
>30′	2	1	2	0	0	0	0	1	1	1	0	1	1	1	0	0	1	1	3	3	5	2	0	1

Principal disturbances.– Particulars of the principal magnetic disturbances recorded during the year are given in Table V. Corresponding information for the same disturbances is given in the Lerwick section. The magnetograms for the most highly disturbed days are not reproduced in this volume, but photographic copies may be obtained on application to the Director, Meteorological Office, Air Ministry, Kingsway, London, W.C.2.

TABLE V - PRINCIPAL MAGNETIC DISTURBANCES RECORDED AT ESKDALEMUIR, 1942

No.	From	To	Horizontal force					Declination					Vertical force				
			Max.	Time	Min.	Time	Range	Max.	Time	Min.	Time	Range	Max.	Time	Min.	Time	Range
	d. h. m.	d. h.	γ	d. h. m.	γ	d. h. m.	γ	′	d. h. m.	′	d. h. m.	′	γ	d. h. m.	γ	d. h. m.	γ
1*	Feb. 23 13 27	Feb. 24 5	661	23 17 2	383	23 22 41	278	67·2	23 16 53	2·8	23 20 51	64·4	1330	23 16 56	964	24 1 40	366
2*	Feb. 27 15 26	Mar. 1 3	576	28 16 18	384	28 12 7	192	58·2	28 14 16	32·3	28 4 25	25·9	1180	28 16 58	1025	28 12 38	155
3*	Mar. 1 7 25	Mar. 2 7	751	1 10 0	95	1 8 15	656	107·2	1 7 46	-16·3	1 9 29	123·5	1179	1 9 27	787	2 1 53	392
4	Mar. 3 1	Mar. 4 7	614	3 17 7	388	3 9 40	226	56·7	3 8 2	19·7	3 17 5	37·0	1206	3 16 32	1017	3 2 49	189
5*	Mar. 5 4 17	Mar. 6 7	594	5 15 23	393	5 20 9	201	64·0	5 19 48	18·0	5 17 46	46·0	1276	5 18 19	976	6 4 39	300
6	Mar. 7 7	Mar. 8 7	565	7 20 35	381	8 2 48	184	53·5	8 2 58	24·3	8 1 55	29·2	1080	7 17 1	918	8 3 11	162
7	Mar. 8 10	Mar. 9 7	599	8 20 8	392	9 1 0	207	49·5	9 0 44	17·9	9 2 38	31·6	1121	8 18 22	891	9 3 29	230
8	Mar. 26 6	Mar. 26 24	583	26 16 17	413	26 16 48	170	58·4	26 14 53	32·7	26 8 50	25·7	1079	26 17 12	1033	26 12 18	46
9	Apr. 2 5	Apr. 4 24	700	4 16 39	322	4 20 23	378	67·3	4 20 18	1·0	4 19 58	66·3	1248	4 16 49	942	4 20 18	306
10*	Apr. 8 1 14	Apr. 9 2	586	8 16 55	473	8 17 15	113	54·0	8 13 58	22·5	8 3 30	31·5	1112	8 17 55	984	8 2 48	128
11	Apr. 13 13	Apr. 14 19	592	14 15 37	285	14 0 51	307	55·8	13 14 10	21·7	14 0 33	34·1	1114	13 16 25	780	14 1 9	334
12	Apr. 16 13	Apr. 19 6	612	18 18 29	329	7 2 14	283	54·8	18 13 40	4·8	17 1 58	50·0	1121	17 16 46	865	17 3 18	256
13	Apr. 23 0	Apr. 24 22	597	23 17 7	425	23 13 12	172	55·1	24 0 36	29·2	23 19 15	25·9	1111	23 17 42	975	24 1 52	136
14	Apr. 27 10	Apr. 28 6	575	27 18 27	407	28 1 50	168	48·7	27 17 40	15·7	28 1 32	33·0	1115	27 19 35	874	28 2 2	241
15	May 4 12	May 5 8	602	4 18 38) 5 1 4)	447	5 1 31	155	54·1	4 16 21	12·6	5 1 44	41·5	1103	4 20 13	920	5 1 30	183
16	May 27 9	May 28 9	648	27 19 4	465	28 6 51	183	53·2	27 13 32	25·0	27 19 1	28·2	1101	27 17 42	1013	27 23 9	88
17	June 11 0	June 12 5	634	11 16 14	472	11 13 32	162	53·9	11 16 11	28·0	11 8 19	25·9	1115	11 19 49	1007	12 1 20	108
18	June 19 10	June 20 7	649	19 17 5	496	19 14 50	153	52·1	19 15 15	34·0	19 21 27	18·1	1113	19 18 32	1026	19 11 52	87
19	July 8 1	July 9 5	626	8 19 59	437	8 11 23	189	53·7	8 14 16	27·2	8 5 20	26·5	1079	8 19 22	1004	9 2 16	75
20*	July 10 23 35	July 12 7	630	11 15 19	420	11 6 12	210	54·8	11 7 29	22·1	11 1 45	32·7	1213	11 15 31	981	11 8 0	232
21	July 15 14	July 16 5	645	15 17 55	470	15 9 17	175	46·8	15 16 41	24·4	15 21 3	22·4	1101	15 17 31	999	16 0 37	102
22	Aug. 10 12	Aug. 11 1	609	10 15 30	460	10 16 4	149	50·6	10 15 22	21·7	10 19 5	28·9	1123	10 18 55	1022	11 0 1	101
23	Aug. 15 18	Aug. 17 6	616	16 20 27	462	16 4 1	154	49·4	16 13 59	6·4	16 20 21	43·0	1105	16 20 11	982	16 5 11	123
24	Aug. 18 6	Aug. 20 6	598	19 21 54	429	19 8 46	169	52·1	18 14 28	20·7	19 18 32	31·4	1092	19 18 30	990	20 2 30	102
25	Aug. 22 21	Aug. 24 5	627	23 16 18	449	23 9 11	178	52·6	23 14 28	18·9	23 23 1	33·7	1149	23 15 56	958	23 1 53	191
26*	Sept. 11 11 36	Sept. 13 5	655	11 22 58	378	12 9 19	277	52·3	12 7 21	20·3	12 0 29	32·0	1103	12 16 40	932	12 0 43	171
27	Sept. 14 12	Sept. 15 7	625	14 19 17	457	14 21 15	168	46·9	14 14 49	25·7	14 19 44	21·2	1098	14 16 57	985	14 23 56	113
28	Sept. 17 9	Sept. 18 6	593	17 17 58	389	17 10 53	204	49·2	17 13 38	20·7	17 17 40	28·5	1123	17 17 35	997	17 22 31	126
29	Sept. 20 8	Sept. 22 8	617	21 18 30	410	21 9 32	207	49·3	21 12 20	22·4	21 18 29	26·9	1096	21 16 47	1015	22 4 20	81
30*	Oct. 2 2 45	Oct. 3 8	726	2 15 28	404	2 20 53	322	58·3	2 13 51	8·1	2 19 52	50·2	1265	2 15 35	908	3 4 18	357
31	Oct. 11 15	Oct. 14 3	588	12 17 54	398	12 10 46	190	49·1	13 12 50	8·2	13 17 23	40·9	1121	13 17 19	1001	13 2 36	120
32	Oct. 28 11	Oct. 31 5	735	28 15 51	212	28 20 58	523	69·7	28 18 9	-3·6	28 21 9	73·3	1421	28 18 28	849	28 23 43	572
33	Nov. 23 11	Nov. 27 1	608	25 21 32	363	24 1 1	245	52·3	24 4 25	6·5	23 22 59	45·8	1126	25 15 49	859	24 1 13	267
34	Dec. 9 13	Dec. 10 6	607	10 0 11	396	9 23 45	211	48 1	9 19 2	6 4	10 0 3	41 7	1183	9 19 45) 9 19 54)	961	10 0 20	222

Where the beginning of a disturbance has been marked by a "sudden commencement", the serial number is followed by an asterisk (*), and the time entered in the second column is that of the sudden commencement, estimated to the nearest minute. In other cases, the exact hour nearest the time at which disturbance may be regarded as having begun is entered in the second column. To the tabulated values of maximum and minimum the following have to be added:— H, 16000γ; D, 12°; V, 44000γ.

REMARKS ON THE AUTOGRAPHIC RECORDS, 1942

During 1942 magnetic activity concurrently with sunspot frequency declined further from its maximum in 1937–38 towards the minimum due about 1944–45. In the following notes the sunspot data have been extracted from an article in the *Observatory* for May 1943. The abbreviation C.M.P. is used for Central Meridian Passage. The mean character figure for the month is shown in brackets after the name of the month.

JANUARY (0·42).— The month was fairly quiet, and there was only one day of notable activity.

The first day of the month was quiet. Disturbance then set in and lasted until the 6th inclusive, the largest oscillation of this period being an isolated one of 136γ in H between 18h. and 19h. on the 5th. The only features of note from the 6th to the 18th were a well defined "sudden commencement" at 8d.23h.8m. without, however, any marked sequel, a moderate bay in D at 12d.20–21h. and a slight disturbance with night maximum and early morning minimum in V on the 16th–17th. The night of the 18th–19th brought moderate disturbance in D (range 37·7′) and less pronounced effects in H and V. During the rest of the month there were no outstanding features.

FEBRUARY (0·57).– This month also was fairly quiet, only one disturbance of note being recorded.

Except for small rapid oscillations on the 2nd, the period 1st–4th was quiet. There was some activity on the 5th, the chief feature of which was a bay of 31′ in D at about 18–19h., and moderate disturbance of the type giving night maximum and early morning minimum in V occurred on the 6th–7th. Thereafter conditions were either quiet or only slightly disturbed until the 23rd. On this day a storm started with a "sudden commencement" at 23d.13h.27m. and lasted until about 24d.5h. Minor oscillations in H preceded the main peak which was recorded at 23d.17h.2m. This was succeeded by an oscillatory decrease until 23d.22h.41m., giving an overall range of 278γ. The traces of the other two elements were similarly oscillatory. The respective ranges were 64·4′ in D between a maximum at 23d.16h.53m. and a minimum at 23d.20h.51m., and 366γ in V between the maximum at 23d.16h.56m. and 24d.1h.40m. Subsequently the only outstanding features of the traces until the 28th were two moderate oscillations in H and D at 25d.20–21h. and 23–24h. and a "sudden commencement" at 27d.15h.26m. followed by a slight disturbance. Greater activity with a "sudden commencement" at 28d.9h.1m. followed and may be regarded as leading up to the major disturbance of March 1–2.

MARCH (1·03).– This was the most disturbed month of the year and included the only storm of the year (that of the 1st–2nd) to be classed as intense. A remarkable example of "giant pulsations" occurred on the 1st.

A "sudden commencement" of large amplitude at 1d.7h.25m. introduced the storm, and rapid oscillations of H and D set in immediately. The H trace reached its minimum at 1d.8h.15m. in the first large swing, the maximum occurring less than 2 hr. afterwards at 1d.10h.0m. The range was 656γ. After some hours of typical swings "giant pulsations" appeared. Their period was about 5 min., their maximum amplitude 136γ at about 16h. and they were continuous from 15h. to 17h. Subsequent, relatively slow, irregular displacements accompanied a slow decrease to a secondary minimum at between 1h. and 2h. on the 2nd. Normal values were reached again at about 2d.7h. The storm variations of D were similar in general character to those of H, but the "giant pulsations" were much less prominent. The overall range was 2° 3·5′ between the maximum at 1d.7h.46m. and the minimum at 1d.9h.29m. The principal feature in the record of V was the large decrease from about 1d.22h. to the time of minimum at 2d.1h.53m., giving an overall range of 392γ. The introductory phase on the previous day gave a higher peak in V than did the main storm. The disturbance was associated with a large sun-spot which crossed the disc from February 22 to March 7, and had its C.M.P. at February 28d.8h.

After the storm of March 1–2 conditions remained mostly disturbed until towards the middle of the month. On the 3rd–4th there were ranges of 226γ in H, 37·0′ in D and 189γ in V. Relative quiet on March 4 continued until a "sudden commencement" at 5d.4h.17m. introduced a disturbance whose greatest range (300γ) occurred in V. The ranges in H and D were 201γ and 46′ respectively. The chief feature in V was a blunt peak between 17h. and 20h. From 20h. to 4h.39m. on the following morning when the minimum occurred there was no great activity. The maximum was recorded at 5d.18h.19m. Approximately normal values were restored at about 16d.7h. The 7th and 8th were disturbed from about 7d.7h. to 8d.7h. The ranges were 184γ in H, 29·2′ in D and 162γ in V. There was disturbance again soon after from about 8d.10h. to about 9d.7h. with ranges of 207γ in H, 31·6′ in D and 230γ in V. The variation of V was of the familiar type with an evening maximum and early morning minimum.

The 9th and 10th with moderate oscillations were followed by two fairly quiet days, but the 13th and 14th again had some moderate oscillations. Thereafter activity was relatively slight until the night of the 19th–20th which was again moderately disturbed. The night of the 21st–22nd was somewhat similar. There followed a fairly quiet period until the 26th. This day had a serrated trace with marked swings shortly before 17h. which gave a range of 170γ in H. The range in D was 25·7′ and in V only 46γ. The rest of the month was mainly quiet, a displacement of the "sudden commencement" type at 31d.23h.35m. having no sequel worthy of note.

APRIL (0·80).– This month had seven disturbances with ranges of over 150γ. On two days the ranges were well over 300γ.

Slight oscillations in the traces of the 1st and 2nd increased to moderate on the 3rd. There was a range of 188γ in V between 2d.18h.10m. and 3d.5h.8m. The traces continued somewhat disturbed during the 3rd–4th. A "sudden commencement" at 4d.4h.37m. was followed by rather low values of H at 7h. and 11h. and later by two sharp oscillations giving the peak value at 4d.16h.39m. and the minimum at 4d.20h.23m. The range was 378γ. The D trace showed a range of 1° 6·3′ which occurred in a double oscillation accompanying a similar one in H. The maximum was recorded at 4d.20h.18m. and the minimum at 4d.19h.58m. The main feature in the V trace was a broken peak extending from about 16h. to 20h. The maximum and minimum values were at 4d.16h.49m. and 4d.20h.18m. and the range 306γ. Conditions were normal again by about midnight.

The next disturbance followed three relatively quiet days. It began with a "sudden commencement" at 8d.1h.14m. and continued until about 9d.2h. There was a moderate undulation in each of the three traces during the first three hours and a few sharper moderate oscillations, especially in H, during the afternoon. The ranges were 113γ in H, 31·5′ in D and 128γ in V between maxima at 8d.16h.55m., 8d.13h.58m., 8d.17h.55m. and minima at 8d.17h.15m., 8d.3h.30m. and 8d.2h.48m. respectively. The 10th was quiet but the 11th had ranges of 139γ in H, 35·9′ in D and 161γ in V. There was a decided disturbance from 13d.13h. to 14d.19h. The chief feature in H was a fairly sharp downward oscillation giving the minimum at 14d.0h.51m. The maximum was recorded at 14d.15h.37m. in a moderate peak. The range was 307γ. The disturbance of D was less pronounced with a range of 34·1′. There was a slow rise of V to a maximum at 13d.16h.25m., and a fall to a trough with the minimum at 14d.1h.9m. The range, namely 334γ, was again larger than that of H.

After a brief quiet interval until about 16d.13h. moderate disturbance occurred, though not continuously, until about 19d. The principal features on the 16th–17th were decreases in all three elements to marked minima two or three hours after midnight, followed by a fairly sharp recovery. The ranges were 230γ in H, 46·7′ in D and 231γ in V. On the 17th there was less activity but on the 18th there were ranges of 185γ in H, 25·9′ in D and 112γ in V with serrated traces. The overall ranges from the 16th to the 19th were 283γ in H, 50·0′ in D and 256γ in V.

After a quiet or only slightly disturbed interval from the 19th to the 22nd a moderate disturbance occurred from about 23d.0h. to 24d.22h. This gave ranges of 172γ in H, 25·9′ in D and 136γ in V. The next disturbance started at about 27d.10h., after two quiet days, and continued until about 28d.6h. The prominent feature in all three elements was a considerable decrease lasting for about two hours after midnight. The ranges were 168γ in H, 33·0′ in D and 241γ in V. The rest of the month was quiet apart from some slight activity on the last day.

MAY (0·42).– The month was fairly quiet; there were only two definite disturbances and these were small.

The slight activity which set in on the last day of April continued in May. It was very slight on the 3rd, but at about 4d.12h. began to develop into a definite disturbance which lasted until about 5d.8h. The H trace rose above normal in the afternoon and fell below normal at night until between 1h. and 2h. on the 5th a marked double swing was recorded. There were two equally high peaks in the trace, one at 4d.18h.38m. and the other at 5d.1h.4m. The minimum was recorded in the swing at 5d.1h.31m. The range covered was 155γ. In D the main variations were like those in H. The range was 41·5′. In V, apart from a marked trough accompanying the double swings in H and D on the 5th, the changes were relatively small. The overall range was 183γ.

From the 6th to the 26th disturbance was not more than slight though there were a few noticeable isolated variations. Moderate disturbance then occurred from about 27d.9h. to about 28d.9h. In H some moderate oscillation and serrated trace led up to a peak at 27d.19h.4m. The range was 183γ between the principal peak and the minimum at 28d.6h.51m. In D there was some amplification of the daily variation and a downward oscillation accompanying the peak in H. The range was 28·2′. The changes in V were not remarkable

and its value ranged over only 88γ. Conditions during the remainder of the month were quiet or only slightly disturbed.

JUNE (0·50).– This month was fairly quiet, like May, with only two disturbances exceeding 150γ.

Quiet prevailed until the 3rd on which day there was some oscillation in H. Thereafter, apart from one or two isolated excursions, the traces were steady until the 11th–12th. Disturbance then set in at midnight and lasted until about 12d.5h. There was moderate oscillation in H during the afternoon of the 11th.

The peak value was reached at 11d.16h.14m. and an oscillatory decrease followed until normal conditions recurred. The range was 162γ. In D and V the disturbance was less pronounced, the respective ranges being 25·9′ and 108γ. Slight to moderate oscillations continued until the 18th with, however, a quiet day on the 15th.

On the 19th there was definite moderate disturbance again, principally in H. This disturbance started at about 19d.10h. and ended at about 20d.7h. In H a decided increase set in after 15h. culminating in an irregular peak between 16h. and 18h. Approximately normal values were resumed about 19h. The range was 153γ between a peak value at 19d.17h.5m. and a minimum at 19d.14h.50m. The ranges in D and V were only 18·1′ and 87γ. There was nothing of special note during the rest of the month, conditions being mainly quiet until the 22nd and slightly disturbed thereafter.

JULY (0·68).– This month was not so quiet as May and June, three disturbances of over 150γ being recorded.

The slight activity of the closing days of June decreased in the early days of July, the 3rd and 4th being quiet. It recurred on the 6th–7th, and a moderate disturbance beginning at about 8d.1h. continued until about 9d.5h. The element most affected was H. A serrated trace with lower values than usual in the forenoon followed the diurnal rise but at 20h. there was a marked double oscillation. The only noteworthy feature thereafter was a moderate trough at between 2h. and 3h. The overall range was 189γ between the peak at 8d.19h.59m. and the minimum at 8d.11h.23m. The other two elements were less affected, the ranges being 25·6′ in D and 75γ in V.

After an interval of decreased activity on the 9th–10th a "sudden commencement" at 10d.23h.35m. introduced further disturbance which lasted until about 12d.7h. Fairly pronounced minima occurred in H at 6h.12m. and towards 9h. Subsequently a serrated rising trace led to a sharp peak at 11d.15h.19m. The value then immediately fell to about normal and apart from a smaller peak at about 20h.40m. no marked features followed. The range was 210γ. The disturbance in D was of similar type, with a range of 32·7′. The V trace showed a steady rise and fall on each side of a single symmetrical peak at 11d.15h.31m., the range being 232γ. Some moderate oscillations were recorded on the 12th, but the 13th was only slightly disturbed.

Moderate disturbance recurred on the 14th and there was a range of 175γ in H on the 15th. Increased serration of the H and D traces began about 15d.6h. and between 14h. and 17h.55m. there was a pronounced rise in H followed by a fall of similar amount to a fairly sharp minimum at 20h.50m. After this minimum the trace returned to about normal. Disturbance in D and V was smaller, the ranges being 22·4′ and 102γ.

Activity was only slight on the 16th–17th and the succeeding two days were almost quiet. Moderate disturbance was however renewed on the 20th. There was considerable serration on this day and moderate bays in all three traces at about 1h. on the 21st. Slight activity continued intermittently until the end of the month, and there were two moderate peaks in H on the night of the 25th.

AUGUST (0·65).– This month also was rather quiet though the number of disturbances exceeding 150γ increased to four.

The first five days of the month were almost quiet. Somewhat more marked oscillation on the 6th–7th was followed by renewed quiet on the 8th. Activity increased somewhat on the 9th and on the 10th–11th there were ranges of 149γ in H, 28·9′ in D and 101γ in V. The principal features were a marked oscillation in H between 15h. and 17h. on the 10th, and moderate peaks in H and V together with a bay in D at about 10d.19h. After slight disturbance on the 11th–12th, conditions became quiet on the 13th and remained so until the evening of the 15th. There was some moderate oscillation during the night and this increased on the 16th, giving ranges of 135γ in H, 43·0′ in D and 91γ in V on the 16th–17th. The chief feature was a rapid decrease of 41′ in D at 16d.20h. accompanied by less outstanding peaks in H and V. Moderate activity persisted for some days thereafter, and the range in H increased again on the 19th–20th to 169γ, the accompanying ranges being 26·6′ in D and 102γ in V. Slight disturbance in the following two days increased to moderate towards midnight on the 22nd–23rd and on the 23rd–24th there were ranges of 178γ in H, 33·7′ in D and 131γ in V. The most prominent features in H were moderate oscillations during the afternoon and evening of the 23rd with considerable serration of the trace. In D there were three notable bays at about 16h., 19h. and 23h. respectively, and V maintained a fairly high value from about 16h. to 19h. There was serration of the 24th and a moderate peak in H at about 19h., followed by slight activity until the evening of the 27th. The remainder of the month was mainly quiet.

SEPTEMBER (0·70).– September continued the series of fairly quiet months though disturbance was increasing. The four disturbed periods were more marked than those of August.

A displacement resembling a "sudden commencement" at 1d.11h.1m. led to nothing more than slight disturbance. This continued until the 5th except for a fairly quiet day on the 3rd. There was some moderate oscillation on the 5th, and thereafter mainly quiet conditions until the 11th. The succeeding disturbance may be said to have begun at about 11d.12h. and to have lasted until 13d.5h. Serrations apart, the trace of H rose more or less according to the usual diurnal variation until two moderate peaks were recorded at about 17h. These were followed between 11d.22h. and 12d.1h. by an outstanding oscillation of about 226γ with short peak and trough. The peak value was the maximum for H but the minimum was not reached until 12d.9h.19m. after a further irregular decrease. A serrated ascending trace succeeded the minimum until about 17h. after which time the trace was fairly steady until interrupted by a fairly rapid rise to an isolated secondary peak shortly before 21h. The overall range of H was 277γ. The trace of D was somewhat less broken than that of H. The main features were moderate bays at about 12d.1h. and 12d.17h. respectively. Its range was 32·0′. There were oscillations corresponding with the peaks in the H trace but they were relatively small. The chief part of the V disturbance was an irregular trough from about 11d.22h. to 12d.5h. This was mainly responsible for the range of 171γ.

Disturbance of a similar character continued on the 13th–14th with a moderate isolated peak between 22h. and 23h. on the 13th. On the evening of the 14th at 19h.17m. a marked peak was followed by a descent in three moderate oscillations to the minimum at 14d.21h.15m. The range between the peak and this minimum was 168γ. Again, the disturbance was of similar character in D but less marked than in H. The ranges of D and V were 21·2′ and 113γ respectively.

Activity of this type was not yet over, and on the 17th a range in H of 204γ occurred in a serrated trace between a minimum at 17d.10h.53m. and a peaked maximum at 17d.17h.58m. The principal peak was followed by another, not much lower, at about 22h. In D more or less ordinary daily values until 17d.11h. were interrupted by a rather sharp decrease to the minimum at 17d.17h.40m. The trace remained lower than usual, with minor oscillations, until towards 18d.1h. at which time it returned to about normal. Its range was not large – 28·5′. The trace of V showed a small peak at 17d.17h.35m. about the time of the principal peak of H and the sharp fall in D, the range being 126γ between this and the minimum at 17d.22h.31m.

Moderate oscillation continued on succeeding days but without exceptional ranges until the 21st–22nd, though mention may be made of a marked bay in D accompanied by moderate oscillation in H and a rounded peak in V between 18h. and 19h. on the 18th. The disturbance on the 21st–22nd was not large. The trace of H showed a minimum (with serrations) at 21d.9h.32m. and the serrated trace subsequently rose, with two moderate downward excursions, until interrupted by a sharp isolated peak at 21d.18h.30m. Its range was 207γ. Again the disturbance in D and V was on a minor scale and the respective ranges were only 26·9′ and 81γ. This brought to an end the somewhat protracted disturbed period. For the rest of the month conditions were mainly quiet and the only notable feature was a considerable displacement in each trace like a "sudden commencement" but without any special sequel.

OCTOBER (0·90).– There were disturbances at the beginning and end of October decidedly greater than any since April. Apart from these the month was fairly quiet.

After a quiet opening day a "sudden commencement" at 2h.45m. on the 2nd introduced the most marked disturbance since April. In H some moderate oscillation was followed by an isolated peak at 2d.15h.28m. Later on there was a marked double oscillation between 20h. and 21h. This gave the minimum at 2d.20h.53m. The range was 322γ. Moderate oscillation continued intermittently during the following two days. In D the diurnal range was larger than usual and there was a marked double oscillation between 20h. and 21h. The range was 50·2′. In V a slow increase from 12h. to 15h. was followed by a sharp peak at 2d.15h.35m. After this V remained fairly high until at about 20h. it fell off in a double oscillation less marked than those of H and D. The minimum was recorded at 3d.4h.18m. Disturbance on the succeeding two days was of similar type with moderate amplitudes. A somewhat marked peak in V at 4d.16h.35m. may be noted.

A period of slight activity with almost quiet conditions on the 9th–10th gave way late on the 11th to a disturbed one. Except for a break on the 17th, this lasted until the 20th. In this period one may distinguish the part from 12d.7h. to 14d.3h. which was marked by a range of 190γ in H on the 12th–13th, and a deep bay in D at 17–18h. on the 13th, giving a range of 40·9′ for the 13th–14th. There was slight activity on the 21st, 25th and 26th, otherwise the period from the 20th to the 27th was quiet.

A storm which was the most intense since that of March 1 set in at 28d.11h. and associated disturbance lasted until the 31st. In H there was a sharp isolated peak at 28d.15h.51m. and an almost equal one shortly after 18h. The trace then fell considerably below normal level from 19h. to nearly midnight. A sharp rift at 28d.20h.50m. gave the lowest value of the period which ended in double oscillation bringing the trace about half way back to normal. Other marked falls in the trace occurred from 6h. to 8h. and 10h. to 13h. on the 29th and there was considerable oscillation again from 19h. to 22h. The range was 523γ. The variation in D began with a larger rise than usual until nearly 28d.15h. Marked oscillations then occurred corresponding with the two peaks in H. The maximum of D was recorded in the second of these at 28d.18h.9m. After this its value rapidly fell below normal and the minimum was recorded in a sharp oscillation at 28d.21h.9m. The return of the trace towards normal again was broken by another sharp decrease at about midnight and a marked increase between 6h. and 9h. As in H there was considerable oscillation again between 19h. and 22h. The range was 73·3′. The range of V was the largest of the year, namely, 572γ. The trace rose from about 28d.11h.30m. at a gradually increasing rate until 15h.30m. at which time a moderate peak accompanied the principal peak of H. The value remained high until 18h.5m. at which time a sharp increase led to the principal, much more marked peak. This peak value was maintained from 18h.15m. to 18h.35m. The descent from the peak occurred in three steep stages with intervening relatively steady values. These stages corresponded with the falls in the other traces at 18–19h., 20–21h. and 23–24h. The minimum value was reached in an oscillation at 28d.23h.43m. There was disturbance in V on the following two days but on a relatively minor scale.

NOVEMBER (0·70).– This month was fairly quiet until the 23rd, but disturbed thereafter.

Slight activity characterized the first five days of November and at 5d.18h.4m. a "sudden commencement" was recorded, without however any marked sequel. A long period of

only slight activity with a number of quiet days followed until the 23rd. The minor storm which then set in began a disturbed period which lasted until the end of the month. The storm may be said to have begun at 23d.11h. as indicated by a gradual increase of V. None of the traces showed much disturbance however until about 21h. In H about this time a fall set in and continued (with an interruption by a marked upward excursion at 23h.) until the minimum was reached at 24d.1h.1m. A sudden recovery then took place and values were about normal until a moderate upward excursion gave a maximum at 24d.4h.10m. approaching the maximum for the whole period, which occurred at 25d.21h.32m. The range during these few hours was about 190γ. From this peak there was a long-continued fall until nearly 10h. after which a fairly rapid recovery restored a more or less normal level broken, however, at 20h. by a marked downward excursion which almost reached the minimum of the early morning. Subsequently there was no outstanding feature in the H trace until the isolated oscillation which gave the maximum at 25d.21h.32m., and again nothing outstanding until the occurrence of a comparable peak at 26d.20h. In D the early fall in H during the night of the 23rd and the subsequent recovery had their counterparts. The minimum of D was recorded at 23d.22h.59m. and the maximum at 24d.4h.25m. Subsequently there were a number of moderate oscillations, some of these corresponding with the more marked oscillations of H. The range of D during the disturbance was 45·8′. The changes in V began with a slow increase lasting from about 23d.11h. to 23d.16h. Little change then occurred until a fairly marked decrease setting in at 21h. gave the lowest value for the disturbance at 24d.1h.13m. An increase of similar type restored normal values by about 8h. Subsequently there were relatively minor displacements of the trace and it was in one of these at 25d.15h.49m. that the maximum was recorded. The range in V was 267γ.

Activity was slight on the 27th and 29th, but moderate on the 28th. The last day of the month was quiet.

DECEMBER (0·42).– Apart from moderate activity in the second week the month was fairly quiet.

The first six days of the month were mainly quiet, though there were some minor oscillations. Slight activity began, however, on the 6th and this increased during the following three days. On the 8th the chief feature was a marked bay in D with its lowest value at about 21h. On the 9th there was moderate disturbance in H culminating in a fairly large oscillation at midnight. This oscillation gave the maximum and minimum values of the disturbance at 10d.0h.11m. and 9d.23h.45m. and had a range of 211γ. The disturbance in D was of similar character to that of H but less marked, at 9d.19h.2m. and its minimum at 10d.0h.3m., the range being 41·7′. In V the main part of the disturbance gave a moderate irregular increase from 9d.17h. to 19h.45m. followed (after a repetition of the same value at 19h.54m.) by a decrease until 10d.0h.20m., the range being 222γ. Conditions were more or less normal again in all three elements by about 10d.6h.

From the 10th to the 20th mainly quiet conditions prevailed. Thereafter there was a period of slight to moderate activity which was most marked on the 21st and 23rd. By the 27th quiet was restored and the closing days of the month were exceptionally quiet.

PRESSURE AT STATION LEVEL

Maximum, minimum and daily mean values in millibars for each day 0h. to 24h., G.M.T.
The initial 9 or 10 of the values is omitted, i.e. 1005.61 is printed 05.61

80 ESKDALEMUIR: h_b(height of barometer cistern above M.S.L.) = 237.3 m. 1942

	JANUARY			FEBRUARY			MARCH			APRIL			MAY			JUNE		
	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean
	millibars																	
1	*00.0*	95.3	*96.9*	86.3	80.7	82.9	90.2	81.5	86.9	73.7	67.7	69.7	*99.4*	92.4	95.5	93.9	90.5	92.2
2	97.1	91.0	95.5	90.3	80.5	86.9	90.2	87.3	88.9	86.2	73.7	82.9	92.8	91.6	92.3	00.4	93.4	97.5
3	91.1	77.1	84.2	85.9	75.3	78.8	88.1	79.5	83.8	85.2	72.6	78.1	97.4	92.1	93,7	*01.4*	99.2	*00.6*
4	86.5	72.5	77.9	98.1	80.7	89.4	82.2	76.1	77.7	73.4	58.5	69.4	97.9	95.8	*96.8*	*01.4*	99.7	00.3
5	95.9	86.5	91.9	99.7	96.8	98.8	87.4	82.2	85.8	63.1	53.5	57.8	96.1	91.2	93.9	00.9	95.5	99.0
6	97.7	95.8	96.8	96.8	90.6	92.5	86.7	83.5	85.1	63.7	57.9	61.0	91.2	82.4	85.9	95.5	87.7	90.7
7	97.8	95.0	96.7	99.1	91.0	95.7	83.5	81.9	82.8	61.2	*53.4*	*56.5*	92.6	82.7	88.1	90.7	88.4	89.5
8	97.6	87.4	92.8	98.7	94.1	96.6	82.3	74.7	77.1	72.0	61.2	67.3	92.7	89.8	91.5	89.8	87.3	88.5
9	93.2	85.6	88.0	95.6	86.4	92.8	87.4	79.1	83.4	72.4	59.6	65.0	91.8	90.1	91.0	90.6	88.0	89.0
10	97.4	92.8	96.2	88.6	79.3	83.6	88.5	87.2	87.8	91.9	62.9	79.9	91.4	83.8	88.1	91.3	89.6	90.3
11	95.9	91.9	93.6	88.6	80.6	86.1	87.7	86.2	87.0	93.9	90.6	92.7	83.8	78.6	80.6	91.2	83.7	87.5
12	91.9	66.2	80.5	80.6	*73.1*	*76.1*	87.3	79.9	83.1	90.6	85.4	87.6	79.7	77.0	78.1	84.0	80.5	82.1
13	67.7	62.5	64.3	96.5	78.6	87.4	79.9	71.1	74.9	93.7	84.7	87.8	85.9	78.7	81.8	83.9	80.3	82.0
14	87.3	67.7	78.0	04.0	96.5	00.7	71.9	69.8	70.8	04.0	93.7	98.6	88.0	85.9	87.0	83.7	82.2	82.8
15	88.8	81.4	86.1	08.4	03.4	05.3	78.0	69.7	73.4	*05.3*	02.9	*04.1*	88.0	79.2	84.3	85.8	82.4	83.8
16	87.8	77.8	81.9	13.8	08.4	11.1	78.6	68.5	75.4	03.4	98.1	00.6	82.2	78.1	80.1	85.8	83.3	84.6
17	91.5	86.2	89.4	*14.5*	10.0	*12.6*	69.6	68.3	*69.0*	98.3	89.3	93.7	83.6	80.2	82.7	83.9	*80.0*	*81.3*
18	92.1	85.6	88.8	10.4	09.2	09.9	75.4	69.3	71.2	89.3	78.9	82.9	81.8	72.9	76.2	93.2	81.0	87.1
19	91.9	83.6	88.2	10.1	03.3	07.2	85.5	75.4	80.5	78.9	77.0	77.9	89.3	81.8	86.5	95.4	93.2	94.4
20	91.3	84.1	88.0	03.8	95.2	99.0	89.8	85.5	87.4	84.1	78.7	81.0	89.3	84.9	87.2	95.2	93.9	94.5
21	93.1	90.6	91.7	95.2	84.8	89.5	98.8	89.8	93.8	85.6	84.1	84.9	85.2	83.8	84.5	94.7	90.9	92.4
22	93.2	85.9	91.1	84.8	79.4	81.4	04.0	98.8	01.5	87.9	85.4	86.4	84.5	82.3	83.2	91.1	87.5	88.8
23	85.9	68.2	75.1	79.4	77.0	77.9	*04.3*	01.8	*03.3*	98.3	87.9	93.4	84.0	67.9	76.5	90.8	88.2	88.9
24	74.5	*56.1*	66.5	81.6	77.1	78.8	01.8	93.1	97.2	99.0	96.8	98.0	77.3	68.2	74.3	96.0	90.7	93.1
25	63.2	56.2	*59.0*	87.9	81.6	84.7	93.6	91.8	92.5	97.5	94.4	96.1	74.2	65.1	67.7	99.3	96.0	97.9
26	86.8	63.1	80.3	89.0	86.4	88.0	93.6	88.3	91.4	94.8	91.8	93.3	68.1	59.1	64.8	97.4	94.7	95.9
27	85.9	62.9	71.9	86.4	73.4	79.0	90.2	85.7	87.2	97.0	93.0	94.7	63.0	55.8	*59.9*	94.9	87.9	91.9
28	67.3	61.5	64.0	81.5	73.4	76.3	92.3	89.1	90.7	00.1	96.7	98.1	70.3	*53.6*	61.8	92.9	86.8	89.3
29	82.8	61.4	75.2				89.1	83.0	85.5	01.8	98.7	00.2	77.9	70.0	73.7	94.8	91.6	93.5
30	82.7	67.4	74.7				83.0	77.6	80.3	02.4	99.4	01.1	83.2	77.8	80.8	94.7	91.9	93.2
31	88.9	74.7	85.2				77.6	*65.8*	69.6				93.7	82.8	87.0			
Mean	88.54	77.87	83.56	94.84	87.21	91.04	87.05	81.34	84.03	88.29	80.95	84.69	85.69	79.21	82.44	92.80	88.87	90.76

	JULY			AUGUST			SEPTEMBER			OCTOBER			NOVEMBER			DECEMBER		
	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean
	millibars																	
1	92.7	89.6	91.1	89.3	82.6	85.8	78.3	76.2	77.5	93.4	80.7	85.6	82.2	78.8	80.3	81.2	71.7	76.2
2	90.4	85.1	87.7	82.6	78.9	80.4	80.3	76.5	78.7	*97.6*	93.4	*96.5*	84.6	81.9	83.2	89.2	81.2	86.0
3	85.5	76.0	81.6	89.5	82.0	85.5	77.3	69.8	72.5	97.0	86.4	93.5	88.1	84.1	86.2	90.1	88.5	89.5
4	78.4	75.6	76.6	93.4	89.4	91.2	82.9	76.5	80.5	86.4	80.7	82.6	88.0	82.5	85.9	89.4	67.5	82.7
5	77.6	75.1	76.1	93.8	92.7	*93.2*	80.9	70.7	75.0	91.0	77.4	82.7	82.5	77.0	79.0	76.1	*57.2*	65.0
6	76.6	73.9	*75.0*	*94.2*	90.7	92.9	92.7	80.9	87.2	96.0	91.0	93.8	77.0	*64.1*	*72.4*	82.2	75.1	79.2
7	79.6	75.5	77.5	90.7	83.9	88.0	93.2	89.4	91.1	91.3	76.9	83.8	78.9	68.2	73.2	77.0	74.1	75.9
8	83.9	79.6	81.7	83.9	72.7	75.8	92.3	88.6	91.1	79.5	75.3	77.1	94.1	78.9	88.1	85.9	75.7	82.5
9	85.6	83.6	84.4	82.1	77.0	80.1	*00.6*	89.1	96.4	82.0	66.7	75.7	95.1	92.2	94.0	82.7	68.8	77.3
10	85.4	81.0	82.9	81.3	66.5	71.5	*00.6*	94.3	*98.1*	78.2	66.7	70.8	98.6	90.1	92.6	75.5	60.0	67.9
11	87.9	82.8	84.9	74.2	*66.2*	*70.2*	96.1	92.5	93.9	91.9	78.2	87.0	98.9	88.4	95.5	72.8	59.9	65.3
12	89.9	87.9	89.3	79.5	73.8	76.2	99.9	96.0	97.8	90.9	84.6	87.2	01.9	86.4	93.5	79.7	72.8	77.1
13	89.7	86.2	87.4	84.5	79.5	82.1	99.8	95.8	98.0	92.0	88.3	91.0	06.4	01.9	04.7	74.1	63.8	66.9
14	89.8	87.1	87.9	85.8	84.2	85.1	95.8	82.2	89.7	88.3	75.4	81.5	06.3	02.0	04.2	72.4	67.7	70.2
15	91.9	83.4	89.6	85.7	79.2	81.7	88.4	81.9	85.3	84.6	76.4	82.0	02.3	97.5	00.6	68.1	64.4	65.9
16	83.4	79.7	80.7	90.1	82.2	87.8	89.7	85.5	88.4	90.5	83.7	87.5	07.0	01.7	05.3	66.2	58.9	62.4
17	87.2	80.7	84.4	87.2	85.2	85.9	88.8	85.0	87.5	89.8	83.3	85.8	07.0	00.6	04.5	64.6	60.4	*61.7*
18	92.8	86.5	90.2	85.6	76.7	82.0	88.1	81.8	84.0	88.8	83.1	85.8	00.9	99.2	99.9	74.1	64.6	70.1
19	92.6	88.9	90.4	77.4	74.6	76.1	84.3	82.2	83.3	88.7	87.3	88.1	00.2	96.6	98.6	76.7	66.8	71.3
20	91.9	89.6	90.3	80.7	76.2	77.6	83.3	65.1	74.0	87.3	80.9	83.1	98.3	95.5	96.9	80.9	68.2	77.8
21	91.6	85.3	89.4	81.7	74.1	78.3	68.1	63.6	65.4	86.8	80.8	84.5	05.7	98.3	02.1	82.1	67.7	76.1
22	85.3	68.8	76.5	82.8	73.8	76.5	68.1	62.5	66.0	80.8	77.3	78.3	06.2	03.3	04.9	96.9	72.0	82.3
23	83.5	*68.5*	77.1	89.8	82.8	87.9	62.5	*57.5*	*59.3*	79.2	71.9	76.9	07.3	02.9	04.5	*98.2*	94.5	*96.4*
24	83.0	74.0	76.6	89.4	80.6	85.3	73.3	59.9	68.2	71.9	64.0	67.4	10.0	07.3	08.9	96.8	90.6	93.3
25	80.9	76.5	79.1	81.5	78.1	79.5	82.3	70.5	76.1	68.8	57.5	65.7	*10.6*	09.7	*10.0*	96.6	94.8	95.5
26	82.6	80.4	81.4	89.8	81.5	85.6	84.5	82.3	83.3	59.1	*55.7*	*57.4*	10.0	03.2	06.6	96.4	93.7	95.2
27	89.2	80.8	83.5	92.7	89.8	91.6	83.5	78.0	81.9	70.5	56.7	62.7	03.2	94.7	99.5	*98.2*	91.1	95.7
28	91.1	85.9	89.3	91.3	84.9	87.3	78.0	66.8	71.3	78.6	70.5	75.5	95.2	85.7	92.3	91.1	76.6	82.6
29	92.6	84.3	87.2	88.1	85.7	87.1	76.4	66.4	71.1	78.4	74.6	76.2	88.0	82.2	85.0	92.9	76.9	85.1
30	*96.0*	92.6	*95.1*	87.5	80.7	84.6	81.6	76.4	80.0	79.8	75.0	77.8	88.4	74.7	84.3	96.2	73.0	89.3
31	95.7	89.3	92.3	80.7	76.9	78.4				79.0	77.5	78.2				80.4	72.3	77.2
Mean	87.23	81.75	84.43	86.03	80.10	82.94	85.05	78.13	81.76	84.45	76.71	80.69	97.43	90.99	94.55	83.38	73.24	78.69
									Annual	88.32	81.28	84.88						

PRESSURE AT STATION LEVEL

Monthly and annual means of hourly values in millibars at exact hours, G.M.T.

81 ESKDALEMUIR: h_b = 237·3 m. 1942

	Hour G.M.T. 0	1	2	3	4	5	6	7	8	9	10	11	Noon	13	14	15	16	17	18	19	20	21	22	23	24	Mean
	millibars																									
Jan.	83·73	83·68	83·82	83·93	83·97	83·83	83·90	83·97	84·18	*84·23*	84·22	84·08	83·77	83·37	83·13	*82·99*	83·01	82·99	83·01	83·08	83·11	83·17	83·28	83·31	83·29	83·56
Feb.	*91·40*	91·22	91·06	90·88	90·69	*90·58*	90·64	90·83	91·04	91·20	91·24	91·23	91·24	91·06	90·84	90·74	90·79	90·93	91·07	91·17	91·25	91·30	91·34	91·31	91·23	91·04
Mar.	*84·62*	84·53	84·25	84·01	83·83	83·79	83·89	84·05	84·28	84·23	84·33	84·30	84·17	83·94	83·70	83·50	*83·42*	83·43	83·73	84·01	84·15	84·21	84·30	84·25	84·20	84·03
Apr.	84·41	84·39	84·39	84·37	84·35	84·45	84·64	84·87	84·95	84·93	84·90	84·84	84·74	84·69	84·59	84·35	84·22	*84·19*	84·41	84·64	85·00	85·08	85·23	85·39	*85·44*	84·69
May	82·75	82·63	82·49	82·27	82·11	*82·09*	82·17	82·29	82·42	82·36	82·41	82·43	82·49	82·54	82·52	82·40	82·40	82·32	82·33	82·50	82·63	*82·78*	82·69	82·67	82·57	82·44
June	91·07	90·98	90·83	90·69	90·58	90·66	90·83	90·91	90·98	90·85	90·85	90·77	90·73	90·60	90·59	90·46	90·44	*90·39*	90·50	90·59	90·77	91·04	*91·10*	*91·10*	91·04	90·76
July	*84·71*	84·55	84·37	84·27	84·23	84·25	84·39	84·47	84·54	84·42	84·48	84·49	84·52	84·45	84·43	84·36	84·39	84·23	*84·19*	84·33	84·41	84·61	84·59	84·68	84·60	84·43
Aug.	*83·45*	83·33	83·18	82·98	82·84	82·76	82·85	82·95	83·08	82·98	82·99	82·98	82·95	82·91	82·84	82·74	82·63	*82·55*	82·65	82·73	83·00	83·12	83·18	83·15	83·05	82·94
Sept.	81·68	81·49	81·36	81·18	*81·06*	81·12	81·27	81·50	81·77	81·85	81·95	81·94	81·90	81·93	81·90	81·74	81·79	81·86	82·08	82·18	*82·32*	82·17	82·10	81·94	81·83	81·76
Oct.	80·70	80·67	80·51	80·35	80·33	*80·23*	80·37	80·61	80·69	80·80	80·96	*81·03*	80·88	80·77	80·71	80·57	80·57	80·72	80·90	80·91	80·93	80·91	80·85	80·71	80·62	80·69
Nov.	94·57	94·52	94·45	94·42	94·41	94·48	94·55	94·72	94·94	95·03	*95·16*	95·12	94·82	94·58	94·30	*94·17*	94·19	94·26	94·40	94·42	94·39	94·43	94·46	94·46	94·43	94·55
Dec.	78·13	*78·04*	78·12	78·32	78·38	78·49	78·61	78·73	78·94	79·07	*79·22*	79·13	78·96	78·82	78·73	78·71	78·97	78·95	78·99	78·92	78·76	78·64	78·48	78·31	78·14	78·69
Annual	85·10	84·92	84·82	84·73	84·65	*84·65*	84·76	84·91	85·07	85·08	*85·14*	85·11	85·01	84·89	84·77	84·65	84·65	84·65	84·77	84·87	84·98	85·04	85·05	85·02	84·95	84·88

The initial 9 or 10 of the value is omitted, i.e. 1001·42 is printed 01·42

PRESSURE REDUCED TO MEAN SEA LEVEL

Monthly and annual means of hourly values in millibars at exact hours, G.M.T.

82 ESKDALEMUIR: h_b = 237·3 m. 1942

	Hour G.M.T. 0	1	2	3	4	5	6	7	8	9	10	11	Noon	13	14	15	16	17	18	19	20	21	22	23	24	Mean
	millibars																									
Jan.	13·26	13·21	13·37	13·50	13·54	13·41	13·52	13·61	13·84	*13·87*	13·81	13·61	13·26	12·81	12·55	*12·42*	12·46	12·46	12·50	12·56	12·60	12·67	12·78	12·81	12·81	13·09
Feb.	*21·41*	21·22	21·08	20·88	20·68	20·59	20·65	20·82	21·01	21·12	21·06	20·98	20·94	20·73	20·48	*20·38*	20·46	20·59	20·90	21·05	21·17	21·26	21·32	21·30	21·23	20·92
Mar.	*14·05*	13·99	13·73	13·48	13·29	13·27	13·39	13·54	13·70	13·54	13·49	13·39	13·19	12·91	12·65	12·44	*12·39*	12·45	12·87	13·23	13·42	13·52	13·64	13·63	13·61	13·29
Apr.	13·55	13·56	13·59	13·60	13·58	13·68	13·84	13·92	13·82	13·69	13·49	13·31	13·15	13·06	12·97	12·74	*12·63*	12·70	13·05	13·47	13·99	14·12	14·33	14·54	*14·62*	13·53
May	*11·63*	11·55	11·44	11·22	11·09	11·05	11·01	10·95	10·97	10·79	10·75	10·70	10·69	10·67	10·66	10·55	10·57	*10·54*	10·63	10·93	11·24	11·51	11·48	11·53	11·46	11·00
June	*19·89*	19·86	19·72	19·61	19·49	19·54	19·58	19·51	19·45	19·21	19·12	18·98	18·87	18·69	18·67	18·54	18·53	*18·50*	18·69	18·89	19·21	19·61	19·78	19·82	19·83	19·23
July	*13·17*	13·05	12·87	12·77	12·75	12·74	12·77	12·70	12·64	12·45	12·53	12·41	12·40	12·28	12·25	12·19	12·23	*12·10*	12·10	12·34	12·56	12·86	12·91	13·07	13·05	12·58
Aug.	*11·63*	11·52	11·40	11·19	11·06	10·99	11·07	11·09	11·15	10·96	10·92	10·86	10·79	10·74	10·65	10·54	10·44	*10·39*	10·53	10·68	11·04	11·20	11·29	11·28	11·20	10·97
Sept.	10·09	09·91	09·80	09·63	*09·54*	09·61	09·77	09·97	10·14	10·13	10·16	10·06	09·98	09·96	09·92	09·77	09·88	10·01	10·36	10·57	*10·75*	10·63	10·57	10·40	10·27	10·07
Oct.	09·30	09·28	09·12	08·98	08·98	*08·89*	09·03	09·26	09·30	09·31	09·40	09·40	09·21	09·10	09·07	08·96	08·99	09·20	09·43	09·47	*09·52*	09·51	09·46	09·32	09·25	09·23
Nov.	24·08	24·05	23·97	23·95	23·95	24·05	24·14	24·31	24·55	*24·59*	24·59	24·41	24·01	23·71	23·42	*23·35*	23·47	23·60	23·77	23·81	23·81	23·85	23·90	23·92	23·93	23·96
Dec.	06·94	*06·87*	06·97	07·17	07·24	07·36	07·49	07·61	07·85	07·96	*08·08*	07·96	07·75	07·57	07·47	07·50	07·81	07·81	07·85	07·78	07·63	07·51	07·31	07·13	06·96	07·53
Annual	*14·08*	13·91	13·83	13·74	13·67	13·67	13·76	13·85	13·94	13·87	13·85	13·74	13·59	13·42	13·30	*13·18*	13·23	13·27	13·46	13·63	13·81	13·92	13·97	13·97	13·92	13·69

The initial 9 or 10 of the value is omitted, i.e. 1001·42 is printed 01·42.

The monthly and annual values of pressure reduced to mean sea level are computed from the corresponding monthly and annual means of pressure at station level and of temperature. See General Introduction to the Meteorological Tables, 1938.

TEMPERATURE

Monthly and annual means of readings in degrees Absolute at exact hours, G.M.T.

83 ESKDALEMUIR: Louvered hut: h_t = 0·9 m. 1942

	Hour G.M.T. 0	1	2	3	4	5	6	7	8	9	10	11	Noon	13	14	15	16	17	18	19	20	21	22	23	24	Mean
	degrees Absolute																									
Jan.	72·96	72·83	72·72	72·57	72·52	72·39	72·11	71·99	*71·89*	72·00	72·45	72·91	73·27	73·62	*73·67*	73·56	73·35	73·17	73·05	73·09	73·03	72·94	72·94	73·01	72·87	72·83
Feb.	70·71	70·70	70·59	70·64	70·66	*70·52*	70·56	70·72	70·96	71·36	72·27	72·91	73·34	73·62	*73·84*	73·79	73·49	72·79	72·20	71·75	71·45	71·10	70·94	70·89	70·77	71·74
Mar.	73·87	73·58	73·40	73·43	73·48	73·33	*73·15*	73·21	73·91	74·99	76·27	76·99	77·59	77·99	78·05	*78·08*	77·81	77·29	76·33	75·61	75·30	74·92	74·67	74·27	74·05	75·32
Apr.	76·45	76·22	76·00	75·70	*75·67*	75·71	75·99	77·44	79·18	80·68	81·90	83·01	83·55	*83·93*	83·85	83·68	83·32	82·47	81·17	79·48	78·10	77·61	77·14	76·70	76·41	79·37
May	78·38	78·09	77·79	77·63	*77·35*	77·46	78·57	80·33	81·54	82·62	83·46	84·17	84·89	*85·57*	85·47	85·39	85·17	84·60	83·78	82·54	80·94	79·91	79·23	78·52	78·27	81·39
June	81·19	80·63	80·39	*80·10*	80·14	80·55	81·77	83·09	84·46	85·48	86·31	86·91	87·62	87·96	*88·05*	88·01	87·98	87·69	86·97	85·95	84·62	83·46	82·42	82·04	81·36	84·33
July	82·69	82·40	82·30	82·06	*81·98*	82·26	83·33	84·82	86·15	86·75	87·51	87·93	88·26	88·85	*88·94*	88·81	88·67	88·35	87·88	86·97	85·63	84·67	83·98	83·33	82·78	85·61
Aug.	84·91	84·74	84·51	84·47	84·38	*84·27*	84·49	85·12	85·88	86·69	87·28	87·69	88·14	88·29	88·45	*88·52*	88·31	88·00	87·60	86·95	86·17	85·75	85·48	85·29	85·09	86·31
Sept.	82·25	82·20	82·04	81·85	81·60	81·47	*81·43*	81·81	82·74	83·65	84·44	85·27	85·67	86·18	*86·25*	85·14	85·52	84·94	83·76	82·81	82·30	82·07	81·99	81·96	82·11	83·35
Oct.	80·37	80·23	80·19	80·01	79·85	*79·76*	79·82	79·85	80·33	81·25	81·95	82·65	82·94	*82·96*	82·75	82·43	82·00	81·48	81·10	80·83	80·55	80·44	80·41	80·31	80·09	81·01
Nov.	75·92	75·96	75·84	75·73	75·52	75·35	75·22	75·27	*75·15*	75·61	76·76	78·03	78·92	*79·49*	79·43	78·83	77·93	77·41	77·10	76·94	76·75	76·70	76·47	76·32	76·03	76·77
Dec.	77·81	77·61	77·49	77·50	77·39	77·35	77·33	77·34	*77·17*	77·31	77·61	77·90	78·20	78·60	*78·61*	78·21	77·74	77·63	77·56	77·53	77·41	77·40	77·67	77·80	77·71	77·67
Annual	78·13	77·96	77·82	77·69	77·59	*77·58*	77·87	78·47	79·17	79·92	80·73	81·41	81·91	82·30	*82·33*	82·17	81·82	81·37	80·76	80·09	79·41	78·97	78·67	78·42	78·18	79·69

The initial 2 or 3 of the readings is omitted, i.e. 275·00 degrees Absolute is printed 75·00.

Add 0·16° to obtain temperature in degrees Kelvin where $T(°K.) = t(°C.) + 273·16$

Maximum, minimum and daily mean values in degrees Absolute for each day 0h. to 24h., G.M.T.
The initial 2 or 3 of the values is omitted, i.e. 275·0° is printed 75·0°. Add 0·16° to obtain temperature in degrees Kelvin where $T(°K.) = t(°C.) + 273·16$

84 ESKDALEMUIR: Louvered hut: h_t (height of thermometer bulb above ground) = 0·9 m. 1942

	JANUARY			FEBRUARY			MARCH			APRIL			MAY			JUNE		
	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean
	degrees Absolute																	
1	80·2	73·6	78·1	72·3	71·2	71·7	74·3	72·6	73·4	80·2	75·1	77·1	87·6	73·5	80·6	85·6	72·2	80·9
2	80·5	77·9	79·6	73·6	70·2	72·2	75·5	71·7	73·7	82·1	70·1	77·3	89·5	73·1	81·3	88·5	82·9	84·7
3	*82·0*	80·2	*81·1*	77·8	70·0	73·6	77·2	72·2	75·2	80·0	71·7	76·4	88·3	71·3	79·8	91·1	79·4	85·5
4	81·0	72·1	76·0	74·1	69·6	72·3	76·6	71·2	74·2	81·9	74·7	77·8	89·8	69·4	80·8	94·6	78·1	87·4
5	72·5	69·2	71·1	72·9	68·5	70·6	71·4	68·0	69·3	82·5	77·9	79·3	86·4	79·2	83·3	*98·3*	79·9	*90·3*
6	74·6	*64·0*	69·9	75·4	68·7	72·2	70·5	68·1	*69·2*	80·6	78·3	79·5	90·1	74·4	83·6	97·3	79·7	88·9
7	78·1	72·7	75·4	74·9	65·3	71·7	74·0	66·6	70·2	83·0	77·7	79·0	84·3	70·7	79·5	86·0	79·4	82·4
8	77·4	67·8	73·7	75·1	66·0	72·2	76·4	68·6	74·1	80·7	75·1	77·4	85·1	70·2	*77·6*	85·1	78·2	81·3
9	75·3	72·8	74·1	76·2	73·7	74·7	77·3	69·2	73·5	83·1	74·3	78·4	85·1	69·9	77·6	87·2	78·5	82·1
10	75·5	70·0	72·7	77·3	68·5	74·0	77·3	67·3	72·2	84·7	77·2	80·4	84·1	75·2	79·0	86·2	76·4	81·6
11	72·3	66·0	70·5	74·7	67·3	71·8	76·3	66·6	71·0	84·2	76·7	80·9	81·4	76·6	78·5	90·0	*71·8*	82·0
12	73·3	72·0	72·7	*78·0*	72·9	*75·0*	73·6	*65·8*	70·8	89·2	77·8	*84·2*	82·4	76·1	78·3	80·1	78·0	*78·9*
13	76·0	66·3	72·5	73·6	68·7	71·6	78·0	70·6	73·8	87·3	76·9	80·8	85·9	75·6	79·8	83·1	78·9	80·4
14	73·5	65·9	70·9	75·7	69·3	72·0	79·9	72·5	75·8	88·2	75·4	81·0	*90·9*	75·4	82·5	84·1	78·2	80·8
15	72·8	68·5	70·1	74·1	70·5	72·5	80·8	77·4	78·9	91·4	71·9	82·1	89·9	77·1	84·7	85·7	78·9	82·1
16	73·5	69·8	72·3	75·2	67·2	70·8	82·2	77·7	80·2	*93·0*	71·9	83·0	89·5	82·5	*84·9*	89·0	75·0	83·0
17	72·4	68·5	70·9	73·4	67·7	71·4	81·4	78·4	79·6	90·4	76·0	83·0	89·2	82·0	84·3	87·3	73·6	82·4
18	73·4	71·1	72·3	74·0	71·3	72·6	84·8	77·2	80·4	88·7	74·4	80·3	87·2	78·7	83·5	86·4	77·3	83·3
19	73·0	68·5	71·2	73·7	65·4	70·2	77·2	73·6	74·9	87·5	76·6	80·8	87·7	77·8	82·6	90·3	76·3	84·6
20	70·0	68·4	69·1	76·5	63·0	70·2	78·4	73·5	75·7	83·6	73·8	79·9	88·1	74·1	82·2	92·6	82·8	87·6
21	69·1	67·0	67·9	73·0	68·2	70·4	82·1	74·2	78·5	87·0	70·5	78·8	89·0	76·3	83·8	88·4	84·3	85·9
22	68·8	66·7	*67·5*	73·0	68·5	70·4	85·0	71·4	77·3	85·4	70·0	79·2	88·1	75·2	81·5	91·3	83·1	87·6
23	77·3	68·8	73·5	74·1	64·1	70·4	86·8	69·3	77·5	80·2	74·4	77·4	86·7	71·9	81·1	91·3	77·3	85·7
24	78·7	73·0	75·3	74·6	63·7	69·9	*87·1*	69·3	77·9	79·3	73·8	*75·9*	85·9	79·3	82·2	89·2	76·8	84·4
25	76·8	73·7	75·6	75·7	64·4	71·1	84·0	73·9	78·5	83·8	72·6	77·7	82·1	77·1	80·3	91·0	80·0	85·5
26	75·7	69·3	70·4	73·4	*62·1*	*67·4*	81·7	70·4	75·8	83·8	72·5	77·6	84·5	77·2	80·1	90·7	75·7	84·7
27	76·1	68·7	72·2	75·0	63·3	71·4	78·0	73·8	75·0	86·7	72·7	79·1	86·1	78·1	82·0	89·5	83·1	85·9
28	75·7	73·5	74·2	74·3	72·2	73·3	75·3	70·6	73·5	85·2	73·1	78·3	86·7	80·0	82·3	91·3	84·6	87·3
29	74·1	71·0	73·2				80·9	69·9	75·3	84·5	73·3	78·3	83·6	78·9	81·4	92·2	81·0	87·4
30	75·2	68·9	72·7				81·2	75·8	78·7	88·4	*69·9*	80·3	87·3	75·8	82·1	91·9	77·0	85·6
31	73·7	69·9	71·2				82·0	78·6	*80·7*				87·7	73·6	82·1			
Mean	75·1	70·2	72·8	74·7	67·9	71·7	78·9	71·5	75·3	84·9	74·2	79·4	86·8	75·7	81·4	89·2	78·6	84·3

	JULY			AUGUST			SEPTEMBER			OCTOBER			NOVEMBER			DECEMBER		
	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean
	degrees Absolute																	
1	94·4	77·7	86·7	95·6	79·9	88·2	*90·2*	85·0	*86·9*	85·7	78·3	83·5	79·7	68·9	75·4	78·6	69·6	74·2
2	*96·0*	82·4	*89·5*	94·2	84·5	88·3	88·8	81·6	84·8	84·6	75·5	80·2	79·0	68·9	74·9	74·6	64·4	70·0
3	90·7	85·4	87·1	86·7	80·6	84·1	89·5	81·8	86·6	83·8	77·0	80·9	78·7	70·9	76·2	73·6	*62·6*	*66·6*
4	89·8	83·7	86·3	87·3	80·5	*83·5*	87·3	82·0	84·6	84·9	83·0	83·8	78·9	66·6	72·6	77·1	62·7	71·1
5	91·0	83·0	86·5	87·6	*78·0*	84·0	89·5	82·0	86·1	85·2	75·6	82·2	79·0	71·3	74·8	79·2	75·0	77·3
6	89·3	83·6	86·0	88·3	80·9	85·1	87·4	81·3	83·9	85·0	75·5	79·7	83·1	73·7	77·7	83·0	75·9	79·0
7	88·7	82·7	85·4	89·5	85·1	87·1	86·1	81·4	84·3	85·7	77·7	82·4	80·8	74·3	77·4	*83·7*	81·3	*82·7*
8	88·2	81·5	84·6	89·1	85·0	87·8	87·7	85·6	86·6	83·9	74·9	79·3	82·0	74·3	78·5	82·6	78·9	80·8
9	89·0	78·0	84·8	89·9	82·8	86·2	88·6	80·0	85·0	84·2	77·3	71·6	82·9	77·3	80·6	83·2	81·4	81·9
10	89·2	76·2	83·4	87·6	85·5	86·6	88·6	76·2	83·4	84·2	78·9	81·1	82·5	76·8	80·7	83·6	77·6	81·4
11	89·3	79·0	85·1	87·0	84·6	85·8	*90·2*	83·2	86·0	84·1	74·9	79·3	81·3	75·8	78·5	83·2	76·0	78·8
12	91·9	75·6	85·3	87·1	84·3	85·4	86·2	82·3	84·1	83·8	75·8	80·3	80·5	71·3	77·2	78·2	73·1	75·9
13	90·3	82·2	86·8	89·4	84·5	86·2	88·1	79·3	83·6	83·9	73·7	79·0	81·1	67·5	74·2	83·3	78·0	81·5
14	88·6	81·0	85·1	91·6	83·5	87·0	87·2	80·4	84·4	86·6	79·4	84·2	*84·0*	76·6	*81·0*	81·0	77·6	79·6
15	87·3	80·8	84·3	89·7	85·1	87·4	86·1	80·1	82·8	83·3	80·6	81·8	83·8	77·2	80·7	81·3	76·5	79·7
16	89·0	84·4	86·4	89·4	84·0	86·1	87·3	80·1	83·5	84·9	82·0	83·0	79·3	73·0	76·0	81·5	77·6	79·9
17	88·5	83·4	85·3	86·6	84·3	85·6	86·7	81·0	84·3	86·4	82·1	84·5	80·0	68·8	75·0	81·1	79·5	80·1
18	90·1	79·1	85·4	89·0	82·4	86·4	87·1	79·9	83·7	87·5	85·7	*86·4*	82·3	70·3	75·6	79·7	78·0	78·9
19	92·2	76·7	85·9	89·1	82·1	86·0	88·6	79·4	83·1	86·4	83·7	85·0	80·8	70·7	76·1	78·7	76·0	77·9
20	90·5	82·5	86·6	88·2	83·0	85·4	86·2	82·0	84·0	84·7	78·3	82·5	82·6	75·2	75·4	81·4	75·0	78·8
21	91·6	82·8	86·7	87·5	83·4	85·5	86·3	81·2	83·9	84·7	78·5	81·8	77·3	66·8	72·7	83·2	79·7	81·7
22	88·2	84·4	86·5	88·1	84·6	86·0	85·6	80·5	82·5	*87·7*	81·7	84·6	76·4	*64·7*	*70·9*	83·5	75·2	79·8
23	89·3	82·2	85·6	86·4	83·0	84·9	84·3	75·7	80·6	84·4	78·2	81·2	81·7	72·8	78·1	81·7	75·0	79·7
24	91·2	82·1	85·9	88·8	82·0	85·6	85·0	75·7	79·6	81·7	76·8	78·5	81·2	78·0	80·1	81·3	74·8	79·1
25	89·3	79·7	84·1	90·0	85·5	87·5	82·0	74·6	*77·6*	79·8	76·2	78·0	79·5	77·1	78·6	78·3	74·2	76·4
26	89·9	78·4	84·0	93·0	84·9	89·5	84·8	72·7	78·1	80·2	*73·3*	77·5	79·6	74·1	76·5	80·2	77·9	78·8
27	91·5	78·0	85·7	94·3	83·3	88·3	85·5	*71·0*	78·0	79·5	74·5	77·9	81·1	73·3	77·3	80·5	72·0	76·9
28	88·6	*75·5*	*83·1*	*98·1*	83·5	*90·3*	88·0	77·4	82·6	82·2	73·7	78·2	77·6	72·7	75·0	80·7	74·6	78·2
29	90·9	80·9	85·9	86·1	84·0	85·3	88·1	78·2	83·3	80·8	77·9	79·1	79·8	72·2	75·9	75·8	70·7	72·5
30	90·4	79·3	84·6	85·7	83·0	84·4	87·3	77·8	82·7	80·7	75·0	77·6	77·5	71·2	74·3	77·0	70·0	72·4
31	92·0	76·4	85·1	90·5	81·6	86·3				79·4	73·8	*76·3*				77·5	74·3	76·2
Mean	90·2	80·6	85·6	89·4	83·2	86·3	87·1	79·6	83·3	83·9	77·7	81·0	80·5	72·4	76·8	80·3	74·7	77·7
									Annual	83·5	75·6	79·7						

F

MEAN RELATIVE HUMIDITY AND VAPOUR PRESSURE FOR EACH DAY

Mean percentages from readings at exact hours 0h. to 24h., G.M.T.: vapour pressure from daily mean temperature and relative humidity

85 ESKDALEMUIR: Louvered hut: h_t = 0·9 m. 1942

	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER	
	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.
	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.
1	91·3	8·0	95·3	5·3	81·5	5·1	81·4	6·7	59·7	6·2	94·6	10·1	73·8	11·6	77·8	13·4	86·8	13·8	87·1	11·1	82·4	6·0	76·9	5·1
2	96·7	9·4	92·4	5·3	85·3	5·5	65·1	5·4	*53·7*	5·9	93·2	12·8	73·0	13·7	85·4	14·9	82·4	11·4	87·3	8·9	89·3	6·3	80·0	3·9
3	94·6	*10·2*	*95·6*	6·1	84·1	6·0	93·0	7·3	62·2	6·1	85·5	12·4	89·7	*14·4*	79·4	10·5	87·2	13·6	94·8	10·1	87·7	6·7	95·0	*3·6*
4	92·5	7·0	87·8	5·1	88·6	5·9	89·7	7·7	63·4	6·7	79·9	13·1	85·6	13·1	*73·3*	*9·3*	87·4	11·9	94·6	12·3	*95·2*	5·6	*97·5*	5·2
5	73·0	3·9	75·3	3·9	95·3	4·4	88·8	8·5	78·0	9·8	72·3	*14·3*	80·0	12·4	78·3	10·3	80·3	12·1	78·4	9·1	89·7	6·2	85·1	7·1
6	85·4	4·1	90·5	5·2	96·1	*4·4*	*95·9*	9·3	65·3	8·4	73·5	13·3	83·1	12·4	76·9	10·9	78·7	10·3	83·8	8·2	91·6	7·8	94·4	8·8
7	82·6	6·0	84·6	4·7	89·4	4·4	92·6	8·7	68·4	6·6	73·6	8·7	85·3	12·3	*96·9*	15·6	91·5	12·3	87·5	10·3	84·8	7·1	95·3	*11·5*
8	86·0	5·5	90·3	5·2	93·3	6·2	83·3	7·0	65·9	5·6	71·8	7·9	87·7	12·0	93·7	15·8	*97·5*	*15·2*	86·0	8·2	89·5	8·1	90·4	9·6
9	*71·7*	4·7	91·4	*6·3*	83·0	5·3	90·2	8·1	65·5	*5·6*	71·4	8·3	75·8	10·5	91·0	13·8	76·1	10·7	93·1	10·4	87·0	9·1	93·3	10·6
10	86·4	5·2	81·7	5·4	80·7	4·6	69·5	7·2	71·0	6·6	73·6	*8·2*	77·8	*9·8*	95·8	14·9	87·6	11·0	83·3	9·0	89·6	*9·4*	91·5	10·0
11	*97·5*	5·0	75·7	4·2	79·0	4·2	92·7	*9·9*	71·4	6·5	71·1	8·5	70·5	9·9	91·4	13·5	85·7	12·8	79·8	7·6	86·6	7·8	91·7	8·5
12	90·3	5·4	81·3	6·2	87·3	4·5	69·3	9·2	73·5	6·5	92·8	8·6	74·5	10·7	88·8	12·8	90·6	12·0	89·6	9·2	79·4	6·5	94·3	7·1
13	92·5	5·4	*61·7*	3·4	79·8	5·2	75·4	8·0	67·2	6·6	91·4	9·4	82·3	13·0	87·1	13·2	83·5	10·7	87·6	8·2	86·6	5·8	85·4	9·5
14	96·0	5·0	68·3	3·9	92·0	6·9	73·0	7·8	70·7	8·4	87·7	9·3	81·3	11·5	89·1	14·2	93·0	12·5	*97·5*	13·0	81·5	8·7	91·7	8·9
15	75·7	3·7	83·7	4·9	*98·7*	9·2	52·5	6·1	64·1	8·8	76·0	8·8	83·8	11·2	96·0	15·7	78·6	9·5	82·3	9·3	78·4	8·2	90·0	8·8
16	80·8	4·7	80·2	4·2	96·4	9·8	63·3	7·8	76·5	10·6	70·4	8·6	86·1	13·2	76·5	11·5	80·7	10·2	78·7	9·7	*72·1*	5·5	88·7	8·8
17	83·8	4·4	83·9	4·6	98·6	9·6	57·0	7·0	80·7	10·8	78·3	9·2	74·1	10·6	93·2	13·6	81·3	10·9	94·1	12·8	80·9	5·7	94·0	9·5
18	96·0	5·6	85·0	5·0	91·0	9·4	73·1	7·5	87·5	*11·1*	86·0	10·8	72·6	10·5	86·6	13·3	87·4	11·2	91·7	*14·1*	89·4	6·6	96·7	9·0
19	92·3	4·9	80·2	4·0	96·3	6·7	82·3	8·7	87·3	10·4	76·4	10·4	79·5	11·8	90·6	13·6	82·5	10·2	97·1	13·6	90·7	6·9	90·9	7·9
20	91·8	4·2	71·1	3·5	97·5	7·2	81·1	8·1	77·5	9·0	83·2	13·8	84·5	13·2	89·7	12·9	92·2	12·1	88·0	10·5	81·2	5·9	93·1	8·6
21	85·3	*3·6*	85·0	4·3	88·2	8·0	72·1	6·7	66·7	8·6	*95·1*	14·1	83·8	13·1	93·5	13·6	93·6	12·2	87·8	9·9	73·9	4·4	91·6	10·3
22	94·4	3·8	84·0	4·2	80·6	6·7	73·8	7·0	83·7	9·3	83·8	13·9	*92·8*	14·4	95·5	14·3	83·2	9·9	82·0	11·2	82·5	*4·3*	86·2	8·5
23	96·0	6·1	64·5	*3·3*	78·9	6·7	85·5	7·2	80·0	8·6	74·3	10·9	83·0	12·1	85·4	11·9	84·5	8·8	83·0	9·0	86·2	7·6	93·9	9·2
24	88·1	6·4	88·5	4·3	78·5	6·8	68·2	5·1	78·5	9·1	78·0	10·5	87·0	12·9	86·7	12·6	85·7	8·3	87·0	7·9	80·8	8·2	92·5	8·7
25	78·5	5·8	83·5	4·4	*72·7*	6·6	62·5	5·3	*88·3*	9·0	73·7	10·7	83·5	11·0	92·6	15·3	85·1	7·2	88·5	7·7	75·9	6·9	94·3	7·3
26	84·0	4·2	89·9	3·6	75·0	5·6	65·4	5·6	84·3	8·5	74·5	10·2	79·0	10·4	88·4	*16·6*	*71·7*	*6·3*	86·5	7·3	79·1	6·2	96·8	8·9
27	88·1	5·1	94·5	5·1	93·6	6·6	61·5	5·8	83·6	9·6	78·5	11·7	*70·0*	10·3	84·0	14·6	84·0	7·3	93·6	8·1	85·5	7·1	91·3	7·4
28	90·8	6·1	90·5	5·6	82·3	5·2	63·3	5·6	85·5	10·0	83·7	13·6	82·3	10·2	83·9	16·6	81·2	9·7	89·8	7·9	78·9	5·6	90·0	8·0
29	90·6	5·6			78·8	5·7	52·9	*4·7*	88·3	9·7	77·6	12·7	80·7	12·0	94·7	13·5	83·5	10·5	83·3	7·8	84·6	6·8	*63·7*	4·8
30	90·6	5·4			97·5	8·9	*49·0*	5·0	76·6	8·9	*69·2*	10·1	80·5	11·0	89·7	12·1	82·8	10·0	*72·3*	6·1	79·8	5·4	71·4	4·2
31	86·8	4·7			95·2	*10·0*			68·4	7·9			82·9	11·7	95·7	14·6			73·8	*5·7*			78·4	6·0
Mean*	88·1	5·5	83·4	4·7	87·6	6·5	74·1	7·1	74·0	8·2	79·7	10·8	80·9	11·8	88·0	13·5	84·9	10·8	86·8	9·5	84·0	6·7	89·2	7·9

* Mean of the column

RELATIVE HUMIDITY

Monthly and annual means of values at exact hours, G.M.T.

86 ESKDALEMUIR: h_t = 0·9 m. 1942

	Hour G.M.T. 0	1	2	3	4	5	6	7	8	9	10	11	Noon	13	14	15	16	17	18	19	20	21	22	23	24	Mean*
	per cent																									
Jan.	87·8	88·3	88·4	88·9	88·0	88·5	89·1	89·4	89·7	89·3	87·4	87·0	86·1	*84·8*	85·3	86·2	87·3	88·1	88·3	88·2	*89·8*	*89·8*	89·7	89·1	87·9	88·1
Feb.	87·7	87·5	87·4	87·5	87·0	87·3	87·0	87·4	87·9	86·6	83·9	80·4	77·0	75·2	*73·9*	74·6	76·1	78·1	81·0	82·5	84·6	86·4	87·6	*88·2*	87·6	83·4
Mar.	91·9	92·2	92·9	93·6	93·2	93·5	92·5	*93·6*	91·9	88·2	83·9	82·4	80·4	80·0	79·9	*79·2*	80·3	82·3	84·5	86·8	88·0	89·5	90·7	91·4	91·8	87·6
Apr.	85·7	86·1	87·3	88·9	*89·1*	88·3	87·4	80·8	76·6	69·9	63·1	59·3	58·4	*56·0*	57·5	57·7	60·4	62·6	68·3	73·0	77·7	80·3	81·7	83·3	84·6	74·1
May	84·2	85·8	86·8	87·3	*87·7*	87·6	83·5	77·6	71·9	68·5	65·7	62·1	60·2	*57·1*	58·5	59·2	60·9	63·1	68·1	71·7	78·3	81·7	82·3	85·3	85·1	74·0
June	89·2	90·1	91·1	91·9	*92·1*	90·5	86·9	83·9	79·2	74·7	72·2	70·7	68·1	*67·5*	68·7	68·7	68·4	70·0	71·9	76·5	81·3	84·8	87·3	87·5	89·3	79·7
July	90·7	91·7	92·1	*92·5*	*92·5*	92·1	88·2	84·7	79·6	76·8	75·7	72·3	71·8	*68·7*	69·4	69·3	69·9	71·1	72·8	75·9	82·2	85·2	86·7	88·8	91·0	80·9
Aug.	93·5	93·2	*94·3*	93·9	93·7	93·2	92·8	91·6	89·5	85·5	82·9	81·7	79·7	79·3	*79·2*	79·8	81·4	83·0	86·2	89·1	91·4	91·7	92·9	92·2	93·5	88·0
Sept.	90·8	91·3	91·5	91·1	91·5	*91·8*	91·1	90·3	88·0	84·9	79·3	77·4	75·0	72·9	*72·6*	73·6	75·4	78·8	83·8	87·0	89·0	89·2	89·8	91·0	90·4	84·9
Oct.	90·8	90·5	89·2	89·2	89·3	90·1	90·0	89·9	89·4	86·7	86·5	82·9	79·4	*77·9*	78·7	79·8	82·0	84·8	86·8	88·5	90·1	90·3	89·7	89·8	*90·9*	86·8
Nov.	86·3	87·9	86·6	87·1	88·9	88·5	*89·1*	88·0	89·0	88·2	84·7	80·3	76·0	*73·4*	73·8	76·7	80·0	81·4	83·1	84·1	84·1	85·9	86·7	86·6	86·6	84·0
Dec.	90·0	90·4	90·5	89·6	89·7	89·9	90·1	89·5	90·1	89·7	89·9	89·4	88·1	86·3	*85·1*	86·5	87·4	87·8	89·4	89·6	90·4	*90·8*	90·7	90·5	90·0	89·2
Annual	89·1	89·6	89·9	90·1	*90·3*	90·1	89·0	87·2	85·3	82·4	79·6	77·2	75·1	*73·3*	73·6	74·3	75·8	77·6	80·4	82·8	85·6	87·1	88·0	88·7	89·1	83·4

VAPOUR PRESSURE

Monthly and annual means of values at exact hours, G.M.T., computed from corresponding mean values of temperature and relative humidity

87 ESKDALEMUIR: h_t = 0·9 m. 1942

	Hour G.M.T. 0	1	2	3	4	5	6	7	8	9	10	11	Noon	13	14	15	16	17	18	19	20	21	22	23	24	Mean*
	millibars																									
Jan.	5·4	5·3	5·3	5·3	5·2	5·2	5·1	5·1	*5·1*	5·1	5·1	5·3	5·4	5·4	5·5	5·5	5·5	5·4	5·4	5·4	*5·5*	5·5	5·5	5·4	5·3	5·5
Feb.	4·5	4·5	4·5	4·5	4·5	4·5	*4·4*	4·5	4·6	4·7	4·9	*4·9*	4·8	4·8	4·8	4·8	4·8	4·7	4·7	4·6	4·6	4·6	4·6	4·6	4·5	4·7
Mar.	6·0	5·9	5·8	5·9	5·9	5·8	*5·7*	5·8	6·0	6·2	6·5	6·7	6·8	7·0	*7·0*	6·9	6·9	6·8	6·6	6·4	6·3	6·3	6·2	6·1	6·1	6·5
Apr.	6·7	6·6	6·6	6·6	6·6	*6·6*	6·6	6·8	7·3	7·3	7·2	7·3	7·4	7·3	7·5	7·4	*7·6*	7·4	7·4	7·1	6·8	6·8	6·7	6·6	6·6	7·1
May	7·5	7·5	7·5	7·4	*7·3*	7·4	7·6	8·0	8·0	8·2	8·3	8·2	8·4	8·3	8·5	8·5	8·6	8·6	*8·3*	8·5	8·4	8·1	7·8	7·7	7·6	8·2
June	9·7	9·4	9·4	*9·3*	9·3	9·4	9·8	10·4	10·7	10·8	11·0	11·2	11·3	11·5	*11·7*	11·7	11·7	11·7	11·5	11·4	11·1	10·7	10·3	10·1	9·8	10·8
July	10·9	10·8	10·8	10·7	*10·6*	10·8	11·1	11·7	12·0	12·1	12·5	12·3	12·5	12·4	*12·6*	12·4	12·4	12·4	12·3	12·1	12·0	11·7	11·4	11·1	11·0	11·7
Aug.	13·0	12·9	12·8	12·7	12·6	*12·5*	12·6	12·9	13·3	13·4	13·5	13·7	13·7	13·8	13·9	14·1	14·2	14·2	*14·3*	14·2	13·8	13·5	13·4	13·2	13·2	13·5
Sept.	10·6	10·6	10·5	10·4	10·2	10·2	*10·1*	10·2	10·6	10·9	10·7	11·1	11·0	11·1	11·1	*11·1*	11·0	11·0	10·8	10·5	10·4	10·3	10·3	10·4	10·5	10·8
Oct.	9·3	9·2	9·1	8·9	*8·9*	8·9	8·9	8·9	9·2	9·5	9·9	*9·9*	9·7	9·5	9·5	9·4	9·4	9·4	9·4	9·4	9·4	9·3	9·3	9·2	9·2	9·5
Nov.	6·5	6·5	6·5	6·5	6·5	6·4	6·4	*6·3*	6·3	6·5	6·8	7·0	7·1	7·1	*7·1*	7·1	6·9	6·8	6·8	6·8	6·7	6·8	6·8	6·7	6·6	6·7
Dec.	7·7	7·7	7·6	7·6	7·5	7·5	7·5	7·5	*7·4*	7·5	7·6	7·7	7·8	*7·8*	7·8	7·7	7·5	7·5	7·6	7·6	7·6	7·6	7·7	7·8	7·7	7·6
Annual	7·8	7·8	7·7	7·7	7·7	*7·6*	7·7	7·9	8·1	8·2	8·4	8·5	8·6	8·6	*8·6*	8·6	8·6	8·5	8·5	8·3	8·2	8·1	8·0	8·0	7·9	8·2

* Mean of values, 1,2,·····23,½(0 + 24).

Amount in millimetres, duration in hours and maximum rate of fall for each day 0h. to 24h., G.M.T.

88 ESKDALEMUIR: h_r(height of receiving surface above M.S.L.) = height of station above M.S.L. + height of receiving surface above ground = 242·0 m. + 0·4 m. 1942

	JANUARY			FEBRUARY			MARCH			APRIL			MAY			JUNE		
	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate
	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.
1	4·8	3·6	9	*27·0*	*24·0*	...	...	...	...	0·5	0·4	...	...	...	...	7·9	8·0	2
2	1·4	2·7	1	12·8	10·8	...	...	...	...	...	...	...	...	...	...	...	...	...
3	*35·0*	*17·8*	*27*	13·7	12·2	...	0·9	3·0	...	12·2	*12·9*	14	...	...	...	0·7	2·9	...
4	25·9	16·7	20	1·1	1·0	...	12·3	10·1	...	6·5	8·4	3	...	...	...	...	...	...
5	...	...	...	0·3	...	...	5·2	*19·8*	...	7·9	7·9	9	...	...	...	0·1	0·7	...
6	...	...	...	1·5	3·0	...	14·5	12·1	...	*20·0*	7·8	*36*	...	...	...	...	...	...
7	...	...	...	0·2	0·2	...	0·8	2·1	...	19·5	11·7	26	...	...	...	0·4	0·1	*17*
8	...	...	...	0·3	0·9	...	10·1	8·5	...	5·1	7·1	12	...	...	...	0·5	0·5	...
9	0·6	0·6	...	1·0	3·3	...	...	...	...	7·0	8·3	17	...	...	...	...	...	...
10	0·7	0·5	...	4·7	3·1	*10*	...	...	...	1·1	1·1	...	...	...	...	...	...	...
11	2·2	7·5	...	0·6	0·5	2	...	...	...	0·6	3·6	...	...	...	...	...	...	...
12	7·3	11·6	...	3·4	3·4	7	0·3	1·0	...	...	...	...	...	...	...	3·6	6·1	5
13	7·0	9·9	...	...	...	...	...	...	...	...	...	...	...	...	...	2·7	8·7	2
14	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2·1	*9·6*	...
15	...	...	...	...	...	...	14·7	17·3	14	...	...	...	4·3	5·3	2	0·8	2·4	...
16	...	...	...	...	...	...	9·9	12·7	9	...	...	...	9·0	5·2	18	...	...	...
17	...	...	...	...	...	...	10·5	12·8	16	...	...	...	9·6	9·6	26	...	...	...
18	1·2	5·0	...	0·1	...	...	1·9	2·1	...	...	...	...	12·6	11·3	14	0·1	0·2	...
19	10·4	9·0	...	...	...	...	...	...	...	...	...	...	8·7	2·1	*81*	...	...	...
20	5·9	7·3	...	...	...	...	1·6	3·8	2	...	...	...	0·1	...	...	1·0	1·8	...
21	6·0	10·3	...	0·2	0·4	...	...	...	...	...	...	...	...	...	...	*8·7*	6·6	12
22	12·6	13·7	...	0·2	...	...	...	...	...	...	...	...	3·2	3·7	12	...	...	...
23	25·2	17·7	...	0·1	...	...	...	...	...	0·7	3·4	...	7·7	8·3	10	...	...	...
24	11·4	6·0	8	0·3	0·3	...	...	...	...	...	...	...	2·8	4·1	15	...	...	...
25	7·1	9·5	5	...	...	...	0·4	0·3	...	...	...	...	*27·3*	*13·4*	27	...	...	...
26	0·2	0·3	...	...	...	...	1·0	2·6	...	...	...	...	10·5	7·2	45	...	...	...
27	19·1	7·4	...	9·1	6·0	...	2·1	6·4	...	...	...	...	11·7	7·7	37	0·1	0·1	...
28	5·5	7·9	...	8·1	6·7	...	...	...	...	...	...	...	10·8	7·5	33	0·4	2·0	...
29	6·2	5·4	...				...	...	...	...	...	...	18·4	9·4	38	...	...	...
30	3·1	4·8	...				12·1	15·7	15	...	...	...	0·6	0·4	9	...	...	...
31	0·7	0·6	...				*20·8*	12·5	*41*				0·1	0·1	1			
Total	199·5	175·9	–	84·7	75·8	–	119·1	143·0	–	81·2	72·6	–	137·4	95·3	–	29·1	49·7	–

	JULY			AUGUST			SEPTEMBER			OCTOBER			NOVEMBER			DECEMBER		
	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate
	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.
1	...	...	...	...	...	...	2·4	2·3	15	1·3	1·9	5	...	...	...	2·3	2·2	9
2	...	...	...	...	...	...	0·5	0·6	3	...	...	...	1·7	2·9	3	...	...	...
3	7·8	7·1	15	0·1	0·2	...	17·1	7·7	33	7·2	10·8	8	2·7	2·6	4	...	...	...
4	8·2	3·0	21	...	...	...	11·9	4·9	18	8·9	14·0	5	...	...	...	9·6	5·1	7
5	0·5	0·4	2	...	...	...	*58·2*	10·1	38	5·3	4·1	10	...	...	...	13·4	7·6	22
6	5·1	1·4	53	...	...	...	0·8	1·0	16	...	...	...	*15·1*	*5·8*	12	9·1	6·1	*99*
7	2·4	1·5	22	2·0	4·5	5	14·4	10·8	15	0·2	0·5	...	0·8	0·2	*18*	11·4	12·9	19
8	3·5	3·3	15	*21·6*	12·2	17	5·1	*11·9*	7	5·5	4·3	17	0·6	0·8	...	12·7	7·3	23
9	3·7	3·3	26	2·3	1·2	30	0·7	0·9	7	*28·1*	*18·0*	50	0·2	0·3	...	19·5	*15·3*	20
10	0·3	0·6	...	21·5	*15·5*	33	...	...	...	9·5	4·4	24	2·1	3·9	3	*39·9*	13·1	13
11	...	...	...	7·9	7·7	15	...	...	...	...	...	...	0·4	0·3	7	2·7	2·6	2
12	0·1	0·3	...	2·8	4·3	10	0·1	0·3	...	7·6	7·7	32	6·3	4·5	8	0·1	0·2	...
13	4·5	4·0	21	0·8	1·3	8	...	...	...	0·2	0·6	...	...	...	...	4·7	4·0	11
14	4·6	2·7	*56*	1·4	2·4	4	4·5	2·7	17	17·0	13·0	*59*	...	...	...	0·7	0·8	...
15	2·9	6·6	2	14·1	11·2	13	4·3	3·1	25	10·9	8·8	28	...	...	...	4·8	3·1	18
16	3·5	4·7	14	0·1	0·1	...	5·7	6·4	12	4·1	3·6	16	...	...	...	10·7	4·8	7
17	2·2	2·3	20	0·5	4·4	...	0·2	...	...	6·7	12·8	7	...	...	...	12·6	9·2	19
18	...	...	...	0·6	1·7	...	4·4	3·3	11	0·9	1·1	...	...	...	...	1·1	1·0	5
19	...	...	...	2·4	3·6	8	0·1	0·1	...	0·5	1·9	...	0·4	...	...	8·3	5·0	13
20	...	...	...	5·2	5·4	36	26·9	11·7	*50*	1·3	3·1	...	0·2	0·2	...	14·1	7·9	10
21	1·5	2·8	3	9·6	8·4	25	6·0	4·1	11	2·0	3·1	5	...	...	...	10·9	6·1	13
22	11·7	*15·6*	11	7·8	4·6	21	1·1	1·3	7	4·0	8·1	...	...	...	...	2·0	3·1	4
23	2·1	4·1	3	...	...	...	4·0	2·5	28	0·2	0·1	...	...	...	...	3·7	6·2	1
24	*18·0*	10·9	15	0·9	0·5	8	1·1	1·1	9	12·2	5·8	30	...	...	...	3·6	3·4	15
25	5·9	1·9	55	21·3	7·8	*73*	4·3	4·5	5	12·4	6·8	6	...	...	...	0·8	1·3	1
26	4·6	0·9	38	1·5	1·1	19	...	...	...	5·6	5·9	3	...	...	...	6·7	8·5	2
27	...	...	...	...	...	...	...	...	...	18·7	16·5	13	...	...	...	4·0	5·1	5
28	5·7	5·1	7	...	...	...	0·3	0·4	...	0·1	0·1	...	0·1	0·1	...	7·2	5·7	22
29	3·1	1·6	20	...	...	...	4·1	4·1	5	0·6	0·7	...	0·3	0·5	...	...	...	...
30	...	...	...	11·3	4·1	33	...	...	...	...	...	...	4·5	2·4	7	12·8	6·3	5
31	...	...	...	1·3	1·1	12				...	...	...				0·3	0·3	...
Total	102·0	84·1	–	137·1	103·3	–	178·2	95·8	–	171·0	157·7	–	35·4	24·5	–	229·7	155·2	–

RAINFALL

Monthly and annual totals of amounts in sixty-minute periods between exact hours, G.M.T.

89 ESKDALEMUIR: h_r = 242·0 m. + 0·4 m. 1942

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	0-24
	millimetres																								
Jan.	5·1	3·9	3·4	4·3	6·9	7·7	12·0	10·4	11·9	10·5	8·1	8·8	*14·9*	13·4	11·1	11·0	8·7	7·1	6·9	4·0	5·3	9·5	7·9	6·7	199·5
Feb.	3·9	4·0	3·8	*6·1*	4·0	2·9	2·9	0·9	0·8	1·6	2·5	3·1	4·0	1·0	3·5	5·1	4·0	6·0	5·5	4·9	3·7	4·8	3·5	2·2	84·7
Mar.	4·0	2·4	7·6	7·6	*8·6*	7·1	5·3	3·4	4·3	4·0	2·6	4·1	7·6	6·5	7·0	5·4	4·4	3·2	2·9	1·0	2·6	7·9	6·9	2·7	119·1
Apr.	1·0	2·2	1·9	3·7	2·5	6·5	6·1	*10·3*	6·5	3·1	1·5	4·4	0·4	2·4	2·1	4·3	4·5	4·6	5·2	2·4	1·2	1·7	1·8	0·9	81·2
May	8·8	9·3	*10·4*	6·6	7·5	8·8	4·0	3·2	7·0	6·8	6·6	2·6	3·5	4·0	7·8	0·9	4·4	5·5	3·5	3·1	4·6	5·3	6·4	6·8	137·4
June	0·9	1·1	0·4	1·0	2·1	*4·5*	2·7	2·0	1·6	1·7	1·1	1·1	1·0	0·6	1·1	0·2	0·2	0·5	1·1	0·5	0·7	1·1	0·9	1·0	29·1
July	4·4	4·3	3·0	3·0	3·8	3·1	7·4	5·1	5·9	6·0	4·3	4·4	1·7	3·8	*8·2*	3·1	2·7	4·3	4·0	3·2	3·2	3·8	4·1	5·2	102·0
Aug.	2·9	3·4	3·4	6·2	11·8	7·0	11·5	8·3	4·8	2·2	4·6	3·0	5·0	7·4	7·7	5·3	3·9	3·0	*16·5*	8·7	5·6	2·4	0·9	1·6	137·1
Sept.	8·7	8·4	*14·1*	12·6	9·2	8·2	4·1	7·9	12·6	8·2	4·4	3·7	3·1	3·7	6·6	11·6	6·0	2·7	8·1	4·9	6·9	5·6	7·6	9·3	178·2
Oct.	7·1	7·2	6·2	7·4	5·9	5·5	4·3	8·1	3·9	3·3	4·3	5·9	8·6	3·9	5·5	9·8	8·2	7·2	10·0	8·3	10·6	8·3	9·5	*12·0*	171·0
Nov.	2·6	0·8	2·6	3·0	1·1	0·0	0·4	0·5	0·1	0·3	0·1	0·0	0·4	0·3	0·3	0·6	0·8	2·6	2·3	4·2	*6·0*	1·8	1·1	3·5	35·4
Dec.	12·1	9·9	3·2	2·6	3·9	2·1	1·3	0·9	2·2	4·9	15·3	10·5	14·4	8·9	7·2	8·4	8·2	14·3	*20·7*	18·1	17·2	17·2	15·7	10·5	229·7
Annual	61·5	56·9	60·0	64·1	67·3	63·4	62·0	61·0	61·6	52·6	55·4	*51·6*	64·6	55·9	68·1	65·7	56·0	51·0	*86·7*	63·3	67·6	69·4	66·3	62·4	1504·4

RAINFALL

Monthly and annual totals of durations in sixty-minute periods between exact hours, G.M.T.

90 ESKDALEMUIR: h_r = 242·0 m. + 0·4 m. 1942

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	0-24
	hours																								
Jan.	5·9	6·2	6·9	7·0	8·6	8·9	8·3	9·8	7·8	5·4	6·2	7·0	6·0	6·8	6·7	8·3	*10·5*	9·0	8·1	5·7	6·3	7·7	6·9	5·9	175·9
Feb.	2·9	2·9	2·4	2·0	2·5	2·2	2·5	2·0	2·3	3·3	4·1	3·2	4·0	1·7	4·8	4·7	4·1	4·6	*5·9*	4·2	2·3	2·1	2·9	2·2	75·8
Mar.	6·1	5·4	6·7	6·8	6·8	7·2	7·1	6·5	*8·0*	6·4	5·7	4·9	4·9	5·5	5·6	6·4	7·1	4·0	4·5	3·8	5·2	6·1	6·5	5·8	143·0
Apr.	1·2	1·9	0·8	2·6	3·7	4·2	4·3	*6·3*	4·7	3·1	1·6	2·7	1·1	1·7	3·1	3·1	4·2	5·1	5·1	4·1	2·8	1·4	1·7	2·1	72·6
May	5·4	4·7	5·4	*6·0*	5·6	5·6	3·4	2·3	4·4	4·1	4·0	2·4	1·9	2·5	2·4	0·8	4·2	3·8	3·3	4·0	4·3	5·1	4·4	5·3	95·3
June	2·5	3·4	1·5	1·5	2·3	3·5	*4·5*	3·4	1·7	1·8	1·0	1·0	1·0	1·2	2·0	0·6	0·7	1·3	2·3	1·6	2·5	3·4	2·7	2·3	49·7
July	3·2	3·5	3·8	3·0	1·6	2·9	4·1	4·9	*5·6*	3·6	1·8	3·4	2·2	2·4	4·0	2·8	3·3	4·2	3·8	3·1	4·4	4·5	4·4	3·6	84·1
Aug.	3·0	3·2	7·0	*7·4*	5·8	5·8	*7·4*	7·3	5·8	3·2	4·0	3·8	3·4	3·8	4·1	5·7	4·6	2·6	2·9	3·2	2·8	1·9	2·4	2·2	103·3
Sept.	4·4	3·8	3·2	4·2	3·6	3·6	2·5	4·1	4·5	2·6	3·3	4·5	3·4	3·6	3·7	5·2	3·0	2·3	4·7	3·4	4·3	5·7	5·7	*6·5*	95·8
Oct.	6·5	6·4	5·9	7·1	5·5	7·7	6·3	7·7	7·4	6·7	6·7	7·2	5·6	5·2	4·1	5·9	6·5	6·3	7·8	7·3	*8·9*	6·2	6·0	6·8	157·7
Nov.	1·9	1·2	1·3	2·6	1·6	0·0	0·8	0·2	0·2	0·5	0·1	0·0	0·7	0·2	0·7	1·1	0·3	1·0	1·1	1·7	*2·7*	1·0	1·2	2·4	24·5
Dec.	7·9	5·0	4·3	3·5	5·1	3·7	2·5	1·3	3·7	4·7	9·2	7·9	7·3	5·3	4·2	4·5	7·4	9·0	10·1	10·7	*10·9*	10·1	9·2	7·7	155·2
Annual	50·9	47·6	49·2	53·7	52·7	55·3	53·7	55·8	56·1	45·4	47·7	48·0	41·5	*39·9*	45·4	49·1	55·9	53·2	*59·6*	52·8	57·4	55·2	54·0	52·8	1232·9

NOTES ON RAINFALL

91 ESKDALEMUIR 1942

Dry Periods

The following definitions are adopted by the British Rainfall Organization
An "absolute drought" is a period of at least 15 consecutive days to none of which is credited 0·2 mm. of rain or more
A "partial drought" is a period of at least 29 consecutive days, the mean daily rainfall of which does not exceed 0·2 mm.
A "dry spell" is a period of at least 15 consecutive days to none of which is credited 1·0 mm. of rain or more

"Absolute drought": April 24–May 14
"Partial drought": April 10–May 14
"Dry spell": April 11–May 14; November 13–29

Wet Periods

The following definitions are adopted by the British Rainfall Organization
A "rain spell" is a period of at least 15 consecutive days to each of which is credited 0·2 mm. of rain or more
A "wet spell" is a period of at least 15 consecutive days to each of which is credited 1·0 mm. of rain or more

"Rain spell": January 18–February 12; October 12–27; December 13–28
"Wet spell": No occasions

Rainfall Duration

Hours	0·1–1·0	1·1–2·0	2·1–6·0	6·1–12·0	>12·0
Number of days	49	18	77	59	26

There were 136 days on which no duration of rainfall was registered
The day with the greatest duration was February 1, when the duration was 24 hr., the precipitation being in the form of snow, the rainfall equivalent being 27·0 mm.

Notable Falls of the Year

The greatest amount in a 60-min. period was 14·4 mm. between 18h. and 19h. on August 25, of which 10 mm. fell in approximately 24 min.
Falls of 5 mm. in 1 hr. or less occurred on 16 days.

Details of the greatest continuous falls are as follows

	January 3	January 31–February 2	February 2–3	October 9–10
Amount (mm.)	31·5	27·8	25·5	27·5
Duration of rainfall (hr.)	14·9	25·3	21·6	16·8

Rate of Rainfall (Jardi recorder)

The highest instantaneous rate of rainfall recorded was at least 99 mm./hr. at 20h. 5m. on December 6. The maximum rate exceeded 50 mm./hr. on May 19, July 6, 14 and 25, August 25 and October 14.

92 ESKDALEMUIR: h_s(height of recorder above ground) = 1·5 m. 1942

	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER	
	Duration	Per cent. of possible	Duration	Per cent. of possible	Duration	Per cent. of possible	Duration	Per cent. of possible	Duration	Per cent. of possible	Duration	Per cent. of possible	Duration	Per cent. of possible	Duration	Per cent. of possible	Duration	Per cent. of possible	Duration	Per cent. of possible	Duration	Per cent. of possible	Duration	Per cent. of possible
	hr.	%	hr.	%	hr.	%	hr.	%	hr.	%	hr.	%	hr.	%	hr.	%	hr.	%	hr.	%	hr.	%	hr.	%
1	...	...	...	...	...	...	2·8	22	13·6	*90*	...	...	9·4	54	7·2	45	3·9	28	0·1	1	2·1	23	1·3	17
2	...	...	...	...	0·2	2	10·4	80	13·2	87	0·1	1	*10·9*	*63*	0·5	3	6·4	47	0·4	3	...	...	*6·6*	*89*
3	...	...	0·4	5	5·7	53	...	...	12·8	84	10·3	61	0·4	2	2·3	15	1·7	12	...	...	0·5	5	3·6	49
4	...	...	...	...	...	...	1·9	14	11·9	77	10·7	63	3·0	17	1·7	11	5·6	41	...	...	3·9	43	...	...
5	*6·2*	*86*	3·1	35	1·7	16	2·5	19	...	...	11·3	66	5·4	31	2·3	15	4·7	35	*8·5*	76	1·7	19	1·4	19
6	2·3	32	...	...	...	...	...	...	11·5	74	11·7	68	6·2	36	1·6	10	6·5	48	2·4	21	...	...	...	...
7	4·8	66	4·8	53	4·2	38	0·4	3	3·4	22	9·1	53	6·9	40	...	...	...	...	0·3	3	4·9	55	...	...
8	3·8	52	...	...	1·5	13	6·4	47	12·6	81	8·6	50	2·5	15	...	...	...	...	4·0	36	1·6	18	...	...
9	6·0	82	0·8	9	9·3	*83*	1·4	10	*13·9*	88	1·6	9	5·5	32	3·1	20	*9·9*	75	...	...	0·1	1	...	...
10	5·1	69	0·2	2	8·6	76	8·2	60	9·5	60	3·5	20	5·5	32	...	...	5·7	43	1·9	17	...	...	...	...
11	...	...	0·1	1	8·6	75	0·5	4	...	...	10·1	59	6·1	36	...	...	5·5	42	4·8	44	1·5	17	...	...
12	...	...	...	...	...	...	6·2	45	0·3	2	...	...	9·5	56	...	...	...	...	...	...	*5·7*	67	2·8	39
13	1·3	17	6·9	73	4·4	38	1·3	9	11·9	75	...	...	2·5	15	0·7	5	2·6	20	4·6	43	5·5	65	...	...
14	...	...	3·9	41	0·4	3	9·9	71	9·2	57	0·1	1	2·2	13	5·2	34	...	...	...	...	4·4	52	0·2	3
15	4·1	54	...	...	0·2	2	13·0	*93*	3·4	21	0·2	1	2·3	14	...	...	6·9	54	1·4	13	2·7	32	0·3	4
16	...	...	*8·4*	*87*	...	...	11·7	83	8·2	51	5·6	32	1·1	7	8·0	54	2·2	17	3·1	30	3·3	40	...	...
17	0·5	6	0·1	1	...	...	12·8	90	4·0	25	2·0	12	2·8	17	...	...	2·1	17	...	...	4·4	54	...	...
18	...	...	0·9	9	2·5	21	9·1	64	1·2	7	2·6	15	5·4	32	0·5	3	4·3	34	...	...	5·5	*68*	...	...
19	...	...	6·6	67	...	...	7·9	55	4·2	26	7·1	41	10·0	60	2·7	18	4·5	36	...	...	0·7	9	...	...
20	...	...	4·7	47	...	...	...	...	4·9	30	1·7	10	2·5	15	2·1	14	...	...	...	...	5·3	66	...	...
21	...	...	1·7	17	0·3	2	11·2	77	8·9	54	...	...	3·7	22	1·4	10	0·1	1	1·8	18	5·0	63	...	...
22	...	...	2·2	22	8·6	70	1·9	13	2·9	18	6·3	36	...	...	0·5	3	2·3	19	2·9	29	2·8	35	1·3	19
23	...	...	4·5	44	9·0	73	1·2	8	1·3	8	13·4	77	2·8	17	...	...	3·2	26	1·8	18	0·5	6	...	...
24	1·0	12	2·4	24	*9·6*	77	1·2	8	7·4	45	2·7	16	4·4	27	0·6	4	5·7	47	0·6	6	...	...	...	...
25	...	...	6·8	66	9·3	75	12·2	83	2·6	16	10·7	62	5·8	35	...	...	2·9	24	1·3	13	...	...	3·3	47
26	0·1	1	2·1	20	5·2	42	12·5	84	3·1	19	7·7	44	8·2	50	2·8	20	9·5	*80*	...	...	3·2	42	...	...
27	...	...	...	...	0·1	1	12·1	81	5·8	35	3·1	18	10·0	62	6·6	47	8·0	68	...	...	3·8	50	4·9	70
28	0·5	6	...	...	...	...	11·8	79	3·9	23	9·4	54	1·9	12	*8·4*	*60*	5·5	47	5·7	60	2·4	31	0·1	1
29	1·2	14			1·0	8	12·5	83	1·7	10	7·0	40	8·0	50	...	...	6·2	53	3·2	34	...	...	3·9	56
30	...	...			...	...	*13·6*	90	8·4	50	*14·4*	*83*	2·6	16	...	...	2·6	22	6·3	67	1·5	20	...	...
31	1·6	19			...	...			10·7	63			5·0	31	0·2	1			7·2	*77*			3·6	51
Mean	1·24	–	2·16	–	2·92	–	6·55	–	6·66	–	5·70	–	4·92	–	1·88	–	3·95	–	2·01	–	2·43	–	1·07	–
											Annual mean		3·46	–										

DURATION OF BRIGHT SUNSHINE

Monthly and annual totals between exact hours, local apparent time

93 ESKDALEMUIR: h_s = 1·5 m. 1942

	Hour L.A.T. 3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	Total	Per cent. of possible
	hours																			%
Jan.	–	–	–	–	...	1·6	6·9	5·9	6·4	*7·0*	5·2	5·4	0·1	...	–	–	–	–	38·5	16
Feb.	–	–	–	...	0·6	3·5	6·3	8·6	8·7	7·7	*9·6*	8·7	5·7	1·2	...	–	–	–	60·6	23
Mar.	–	–	...	0·3	4·8	8·5	9·7	*12·2*	11·7	11·4	9·6	7·6	7·1	6·6	0·9	...	–	–	90·4	25
Apr.	–	...	2·3	10·8	15·3	16·3	16·3	16·7	17·4	18·3	*18·4*	16·3	17·0	14·4	12·9	4·2	...	–	196·6	47
May	...	0·1	8·3	12·0	13·4	14·8	17·6	*18·3*	17·9	18·1	16·6	15·6	15·0	15·1	16·3	7·0	0·3	...	206·4	39
June	...	0·8	6·0	8·3	9·7	12·7	13·2	*15·2*	14·6	13·2	14·8	12·8	13·4	13·1	10·8	9·4	3·0	...	171·0	33
July	...	0·5	4·1	10·8	11·6	10·7	12·1	10·2	11·6	12·0	10·8	11·6	11·7	*13·5*	13·2	7·2	0·9	...	152·5	29
Aug.	–	...	0·2	2·1	3·3	5·7	6·0	5·7	*6·5*	5·3	5·4	6·0	5·7	3·1	2·7	0·7	...	–	58·4	13
Sept.	–	–	...	1·2	4·4	8·2	10·4	13·8	13·5	14·1	14·2	*14·3*	12·0	9·9	2·5	–	–	–	118·5	31
Oct.	–	–	–	...	1·3	7·6	*9·8*	9·4	9·6	9·5	6·2	4·7	3·4	0·8	...	–	–	–	62·3	19
Nov.	–	–	–	–	0·1	1·8	7·2	13·4	12·6	*14·5*	11·2	9·6	2·6	...	–	–	–	–	73·0	29
Dec.	–	–	–	–	–	0·7	3·9	4·9	6·0	*6·8*	6·6	4·3	0·1	–	–	–	–	–	33·3	15
Annual	...	1·4	20·9	45·5	64·5	92·1	119·4	134·3	136·5	*137·9*	128·6	116·9	93·8	77·7	59·3	28·5	4·2	...	1261·5	28

Mean speed and highest instantaneous speed recorded each day (0h. to 24h., G.M.T.) by the pressure-tube anemograph

94 ESKDALEMUIR: h_a(height of anemograph above M.S.L.) = height of ground above M.S.L. + height of anemograph above ground = 235 m. + 15 m. 1942

	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER	
	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust
	metres per second																							
1	4·7	14	2·3	8	5·0	13	7·7	18	2·5	12	5·7	18	1·7	8	0·9	8	6·2	14	4·9	12	1·4	7	3·1	16
2	4·6	17	2·4	6	3·4	16	7·7	23	2·7	13	*8·5*	17	3·0	11	2·9	11	4·0	13	2·1	9	*0·2*	3	1·1	7
3	8·6	19	2·9	14	3·6	15	2·9	12	2·3	10	5·8	15	6·9	19	5·5	18	7·3	18	2·9	16	0·5	4	*0·1*	2
4	8·8	25	5·0	14	8·1	*20*	4·0	15	2·7	15	2·7	12	5·8	20	1·6	7	*9·9*	27	7·3	19	0·4	7	1·5	13
5	5·6	13	3·7	13	*10·4*	17	8·8	19	6·3	15	1·5	8	5·3	17	2·0	10	9·7	23	8·0	27	0·5	4	5·9	20
6	1·4	13	1·3	9	7·5	15	*10·8*	*23*	9·2	24	3·8	13	7·6	16	2·8	9	5·7	18	2·6	10	5·2	*25*	5·0	23
7	2·7	15	1·9	13	1·5	12	5·2	19	4·8	18	6·7	*21*	7·3	17	4·2	10	7·3	18	6·0	19	5·5	15	12·7	25
8	3·0	14	1·3	8	7·0	19	8·6	21	3·0	11	6·4	20	6·1	18	6·2	*25*	7·7	18	6·0	20	3·4	12	8·6	24
9	6·8	25	1·8	10	1·1	6	4·0	18	3·8	15	2·5	14	3·6	13	4·7	14	4·6	16	10·4	26	5·0	13	*13·3*	31
10	1·3	12	5·1	17	0·7	5	5·4	19	7·1	19	1·8	10	2·3	8	8·8	17	5·6	19	7·6	22	*5·9*	16	9·5	*34*
11	*0·1*	4	6·0	17	1·3	9	2·8	11	7·7	22	2·3	13	2·4	9	8·6	23	3·5	11	3·4	14	3·1	12	5·2	25
12	4·9	14	*7·5*	*22*	3·2	12	4·3	16	7·6	20	3·9	11	3·1	11	6·4	18	3·7	11	3·6	15	3·5	19	2·0	10
13	1·6	10	5·9	17	2·2	9	4·1	13	5·8	17	4·6	12	4·1	13	4·0	15	*1·2*	6	2·4	10	1·0	7	11·7	29
14	0·4	5	1·2	11	1·2	5	3·3	11	2·0	9	4·4	15	3·7	15	2·2	11	5·5	20	10·2	25	4·7	20	4·6	19
15	4·9	18	*0·0*	1	3·1	11	1·2	7	3·8	15	2·0	8	5·1	14	5·9	18	9·0	*27*	*11·9*	*29*	5·6	23	4·8	15
16	6·4	19	0·3	5	3·0	11	*0·7*	8	6·2	17	1·9	11	4·9	14	6·4	19	5·7	20	9·4	24	1·8	10	7·2	23
17	0·9	6	2·5	11	3·3	13	3·1	13	4·3	15	4·2	15	6·6	19	*11·1*	22	4·4	21	5·7	17	2·7	20	3·8	13
18	0·5	6	3·5	11	0·7	7	4·9	13	4·9	17	2·9	13	5·4	19	6·0	17	4·9	18	4·6	16	0·5	13	1·6	5
19	5·0	16	1·2	7	2·5	11	1·9	9	3·7	15	2·4	12	2·4	13	5·4	15	2·1	12	3·9	11	1·6	19	3·9	16
20	1·1	7	0·9	9	*0·3*	4	1·3	10	*1·0*	11	2·4	10	3·1	17	8·1	19	3·5	13	3·1	10	3·1	14	7·4	22
21	3·4	9	5·4	14	0·4	5	2·0	11	2·1	9	2·7	9	5·7	17	7·2	17	4·2	15	4·6	17	2·5	11	11·9	23
22	4·5	10	3·9	7	0·4	5	1·5	9	1·5	10	4·6	18	*8·4*	*24*	4·9	14	6·2	19	9·4	24	1·6	13	9·4	24
23	2·4	12	1·2	7	0·9	9	5·5	15	4·1	16	2·4	11	4·2	17	3·7	13	5·6	19	6·3	23	2·0	14	9·1	22
24	2·4	15	0·2	4	2·6	11	6·3	15	6·6	19	1·7	11	6·7	21	2·2	8	2·6	13	6·7	19	1·2	7	7·0	23
25	*9·9*	27	0·4	6	3·6	16	7·5	22	8·5	22	2·7	11	6·9	23	2·2	9	4·0	17	4·4	16	0·6	4	0·9	10
26	3·4	21	0·4	5	3·1	9	7·3	22	6·3	16	3·1	15	2·5	13	0·9	7	1·8	9	3·5	16	0·8	6	5·7	14
27	6·7	*29*	4·7	19	3·3	12	6·5	21	*9·5*	23	4·0	16	2·3	12	*0·7*	7	2·2	12	3·4	14	1·4	8	1·0	14
28	6·5	17	3·6	15	3·5	12	8·7	23	9·0	*25*	5·1	18	1·9	9	1·0	6	3·1	11	*1·6*	8	2·8	20	9·2	22
29	3·4	15			0·9	7	8·3	23	3·9	15	3·5	13	4·1	14	5·8	16	2·2	17	6·3	19	3·6	20	10·2	23
30	2·8	10			3·5	15	3·5	13	2·8	12	*1·1*	9	*1·7*	7	5·2	17	2·1	10	6·6	21	3·7	15	6·1	19
31	1·5	13			6·5	20			3·4	14			2·3	9	3·3	15			3·7	14			7·7	24

WIND

Monthly and annual means of mean wind speed between exact hours, G.M.T.

95 ESKDALEMUIR: h_a = 235 m. + 15 m. 1942

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	metres per second																								
Jan.	3·8	3·5	3·5	3·4	3·4	3·5	*3·1*	3·2	3·2	3·7	4·3	4·4	4·2	4·5	*4·7*	4·5	4·4	4·3	4·3	4·1	3·8	3·8	4·0	3·7	3·9
Feb.	2·2	*2·0*	2·3	2·4	2·8	2·4	2·6	2·4	2·2	2·7	2·8	3·0	3·2	3·3	3·3	*3·5*	3·1	3·0	3·4	3·0	2·6	2·4	2·3	2·5	2·7
Mar.	2·5	2·5	2·4	2·2	*2·2*	2·3	2·4	2·5	2·8	2·9	3·5	3·8	4·1	4·2	*4·3*	4·3	4·1	3·8	3·5	3·4	3·4	3·2	2·9	2·5	3·1
Apr.	3·9	3·8	3·9	3·7	3·8	3·8	4·2	4·9	5·8	5·5	6·7	*7·1*	7·0	7·0	6·8	6·9	6·3	5·5	4·4	3·7	3·5	3·5	*3·4*	3·6	5·0
May	3·2	3·1	3·0	3·1	*2·6*	2·8	3·8	4·8	5·9	6·6	6·9	6·9	6·8	*6·9*	6·6	6·7	6·6	6·2	5·2	4·2	3·3	3·3	3·7	3·3	4·8
June	2·2	2·3	1·8	*1·8*	1·9	2·3	3·0	3·7	4·4	4·7	5·1	5·2	5·2	*5·3*	5·0	5·0	4·9	4·6	3·9	3·7	3·0	2·4	2·1	2·1	3·6
July	3·4	3·6	3·2	*3·0*	3·2	3·4	3·8	4·4	4·8	5·4	5·6	5·7	5·6	5·6	*5·7*	5·6	5·5	5·5	4·9	4·3	3·7	3·5	3·2	3·6	4·4
Aug.	3·5	3·6	3·8	3·8	3·7	3·6	3·9	4·6	4·8	5·2	5·6	5·6	5·6	5·8	*6·1*	5·8	5·6	5·2	4·4	4·1	3·8	3·6	3·7	*3·5*	4·5
Sept.	4·1	4·0	4·3	4·2	4·3	4·3	4·4	4·7	4·9	5·4	5·9	6·2	6·0	6·5	*6·6*	6·2	5·8	5·1	4·1	3·9	3·9	*3·7*	4·0	4·0	4·9
Oct.	4·8	*4·5*	4·8	4·7	5·2	5·3	5·1	5·7	5·9	6·3	6·6	7·2	7·2	*7·4*	7·0	6·4	5·6	5·2	5·0	4·7	4·8	4·8	4·9	4·6	5·6
Nov.	2·3	2·4	2·5	2·5	2·2	2·0	2·1	*2·0*	2·0	2·1	2·4	2·6	3·2	*3·5*	2·9	3·0	2·7	2·4	2·7	2·6	2·8	2·8	2·8	2·4	2·5
Dec.	6·9	6·5	6·1	6·0	5·9	5·6	*5·3*	5·5	5·6	6·1	6·4	6·6	6·3	6·5	6·5	6·3	5·7	6·1	6·0	6·3	6·0	6·3	*6·9*	6·8	6·3
Annual	3·6	3·5	3·5	*3·4*	3·5	3·4	3·7	4·1	4·4	4·8	5·2	5·4	5·4	*5·6*	5·5	5·4	5·0	4·8	4·3	4·0	3·7	3·6	3·7	3·5	4·3

DISTRIBUTION OF WIND SPEED, EXTREME VELOCITIES AS RECORDED BY PRESSURE-TUBE ANEMOGRAPH

96 ESKDALEMUIR: h_a = 235 m. + 15 m. 1942

	DISTRIBUTION OF WIND SPEED								EXTREME VELOCITIES				
	More than 17·1 m./sec.		10·8 to 17·1 m./sec.		5·5 to 10·7 m./sec.	1·6 to 5·4 m./sec.	Less than 1·6 m./sec.	No record	Highest hourly wind			Highest gust	
	Dates of occurrence	Duration	No. of days	Duration	Duration	Duration	Duration	Duration	Veer from N.	Speed	Hour ended	Speed	Date
		hr.		hr.	hr.	hr.	hr.	hr.	°	m./sec.	day h.	m./sec.	day h. m.
Jan.	–	0	6	33	199	246	266	0	290	14	25 23	29	27 23 35
Feb.	–	0	2	4	124	235	309	0	280	13	12 13	22	12 13 5
Mar.	–	0	2	11	152	270	311	0	80	13	5 14	20	4 17 45
Apr.	–	0	11	63	226	282	149	0	210	14	6 10	23	6 9 25
May	–	0	6	36	279	269	160	0	220	16	6 15	25	28 11 15
June	–	0	2	2	164	362	192	0	230	11	2 13	21	7 10 50
July	–	0	7	19	230	353	142	0	250	13	22 16	24	22 20 40
Aug.	–	0	5	28	278	269	169	0	200	15	8 10	25	8 9 20
Sept.	–	0	6	33	276	275	136	0	210	17	5 6	27	15 9 55
Oct.	–	0	11	71	269	309	95	0	230	16	9 15	29	15 14 0
Nov.	–	0	3	7	105	264	344	0	200	16	6 21	25	6 20 0
Dec.	9, 10 13, 21	8	17	141	228	205	162	0	210	20	10 1	34	10 0 15
Year	4	8	78	448	2530	3339	2435	0	210	20	Dec. 10 1	34	Dec. 10 0 15

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	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER	
	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.
	degrees Absolute																							
1	76·6	80·1	75·5	78·4	74·8	77·6	78·2	77·9	81·4	79·6	83·0	81·1	86·3	82·7	86·3	84·1	86·7	84·8	84·0	84·1	80·9	83·0	78·2	81·1
2	76·6	80·0	75·3	78·4	74·8	77·7	78·3	78·1	80·9	79·7	83·0	81·1	87·0	82·9	87·0	84·1	86·8	84·8	84·0	84·1	80·3	82·8	78·0	80·9
3	77·2	80·1	75·3	78·4	74·9	77·6	78·0	78·0	81·1	79·6	83·1	81·1	87·0	82·8	86·9	84·1	86·8	84·8	83·9	84·1	80·1	82·8	77·3	80·8
4	78·1	80·0	75·5	78·3	74·7	77·4	78·0	78·1	81·2	79·5	84·0	81·2	86·9	83·1	86·6	84·1	86·7	84·8	83·7	84·0	80·0	82·6	77·0	80·7
5	78·1	80·0	75·5	78·3	74·1	77·2	78·2	78·2	81·6	79·6	84·6	81·2	86·8	83·1	86·5	84·1	86·7	84·8	84·0	84·1	79·8	82·4	76·9	80·6
6	77·5	80·0	75·3	78·6	74·3	77·3	78·5	78·1	81·6	79·7	85·4	81·3	86·6	83·2	86·3	84·1	86·4	84·8	83·9	84·0	79·7	82·3	76·7	80·4
7	77·0	79·9	75·3	78·1	74·8	77·3	78·7	78·1	81·7	79·7	85·7	81·2	86·4	83·2	86·3	84·1	86·0	84·8	83·5	84·0	79·8	82·2	77·2	80·5
8	76·8	79·9	75·3	78·1	74·6	77·1	78·8	78·1	81·5	79·9	85·2	81·5	86·3	83·3	86·3	84·1	86·0	84·7	83·5	84·0	79·9	82·1	78·0	80·5
9	76·7	79·8	75·3	78·1	74·8	77·4	78·7	78·1	81·2	79·9	84·8	81·7	86·3	83·4	86·6	84·1	86·0	84·8	83·5	84·0	80·0	82·1	78·4	80·5
10	76·5	79·8	75·3	78·1	74·7	77·2	78·8	78·1	81·2	80·1	84·2	81·9	86·1	83·4	86·4	84·1	85·8	84·7	83·0	84·0	80·0	82·2	79·0	80·3
11	76·1	79·4	75·2	78·1	74·7	77·1	79·0	78·2	81·1	80·1	84·0	81·8	86·0	83·4	86·4	84·1	85·8	84·7	82·9	84·0	80·5	82·1	79·5	80·3
12	76·2	79·4	75·2	78·1	74·7	77·1	79·3	78·4	80·9	80·1	84·0	82·1	86·1	83·7	85·1	84·1	86·0	84·7	82·7	83·9	80·6	82·1	79·4	80·3
13	76·1	79·4	75·2	78·1	74·7	77·1	79·8	78·4	80·8	80·1	83·7	82·0	86·1	83·3	86·0	84·2	85·9	84·5	82·4	83·8	80·2	82·3	79·0	80·2
14	76·0	79·2	75·1	78·1	74·9	77·1	80·0	78·6	80·9	80·1	83·5	82·1	86·1	83·3	86·0	84·2	86·3	84·8	82·7	83·6	79·8	82·1	79·2	80·2
15	76·0	79·1	75·1	78·1	74·9	77·1	80·1	78·7	81·5	80·2	83·2	82·0	86·0	83·4	86·2	84·2	85·7	84·8	82·7	83·7	80·0	82·0	79·2	80·2
16	76·0	79·1	75·1	78·0	73·0	77·1	80·9	78·8	82·0	80·2	83·5	82·0	86·0	83·4	86·4	84·3	85·3	84·8	83·0	83·6	80·0	81·8	79·2	80·3
17	76·0	79·1	75·0	78·0	75·3	77·1	81·0	78·8	82·7	80·1	83·7	82·0	86·0	83·5	86·5	84·3	85·2	84·8	82·8	83·6	79·3	81·7	79·2	80·2
18	76·0	79·1	75·0	78·0	75·0	77·1	81·0	78·8	82·8	80·1	83·9	82·1	86·0	83·5	86·4	84·4	85·2	84·8	83·1	83·5	79·0	81·6	79·3	80·2
19	75·9	79·1	75·0	78·0	77·0	77·1	81·1	79·1	82·7	80·2	84·0	82·1	86·0	83·6	86·4	84·5	85·2	84·7	83·6	83·2	79·0	81·5	79·4	80·2
20	75·8	79·1	75·0	78·0	77·0	77·1	81·2	79·1	82·5	80·3	84·5	82·1	86·5	83·7	86·4	84·6	85·0	84·7	83·8	83·1	79·0	81·5	79·3	80·3
21	75·8	79·1	75·0	77·9	77·0	77·2	81·0	79·1	83·0	80·4	85·0	82·1	86·5	83·7	86·3	84·5	85·0	84·4	83·5	83·3	79·0	81·4	79·5	80·1
22	75·6	79·0	74·9	77·6	77·2	77·2	81·0	79·1	83·0	80·4	84·7	82·2	86·3	83·8	86·2	84·5	85·0	84·4	83·4	83·1	78·7	81·6	79·8	80·2
23	75·8	79·0	75·0	77·9	77·5	77·2	81·0	79·1	82·8	80·6	85·4	82·2	86·2	83·8	86·2	84·6	84·8	84·3	83·2	83·2	78·3	81·3	79·6	80·3
24	76·0	79·0	74·9	77·7	77·6	77·4	80·5	79·2	82·6	80·6	85·8	82·2	86·0	83·8	86·1	84·4	84·4	84·4	83·0	83·1	78·3	81·4	79·6	80·3
25	75·8	78·6	74·9	77·7	77·9	77·4	80·0	79·3	82·9	80·8	85·7	82·3	86·0	83·8	86·1	84·3	84·0	84·3	82·3	83·5	78·3	81·3	79·5	80·3
26	75·9	78·6	74·7	77·6	78·0	77·6	80·0	79·4	82·7	80·8	86·0	82·4	86·0	84·0	86·3	84·4	83·6	84·4	82·3	83·4	78·7	81·4	79·5	80·3
27	75·4	78·5	74·7	77·4	77·8	77·5	79·9	79·6	82·5	80·7	86·0	82·4	86·0	83·9	86·7	84·5	83·5	84·6	81·9	83·3	78·6	81·4	79·5	80·4
28	75·5	78·8	74·8	77·7	77·8	77·8	80·0	79·6	82·6	80·6	85·9	82·8	86·0	83·9	87·0	84·5	83·4	84·5	81·6	83·4	78·8	81·5	79·0	80·2
29	75·5	78·4			77·4	77·8	80·0	79·7	82·7	81·0	86·0	82·6	86·0	83·9	87·4	84·5	83·2	84·4	81·6	83·4	78·7	81·2	79·0	80·2
30	75·3	78·3			77·4	77·9	80·0	79·7	82·7	81·0	86·2	82·7	86·0	83·9	87·0	84·6	83·7	84·3	81·7	83·3	78·4	81·1	78·0	80·2
31	75·3	78·4			77·8	77·9			83·1	81·1			86·0	84·0	86·6	84·8			81·3	83·1			77·7	80·2
Mean	76·2	79·3	*75·1*	78·0	75·9	*77·3*	79·7	78·7	82·0	80·2	84·6	81·9	86·2	83·5	*86·4*	84·3	85·3	*84·6*	83·0	83·6	79·5	81·9	78·7	80·4
											Year		81·1	81·1										

MINIMUM TEMPERATURE "ON THE GRASS" DURING THE INTERVAL 18h. TO 7h., G.M.T.

98 ESKDALEMUIR 1942

	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
	degrees Absolute											
1	71·2	68·1	72·0	74·5	69·3	*68·8*	73·5	76·1	84·7	78·6	69·3	74·9
2	76·6	72·3	70·2	74·0	69·6	83·0	79·4	82·8	78·4	72·3	64·7	62·8
3	79·2	67·7	69·4	69·2	66·1	82·5	85·3	82·9	80·7	72·0	75·0	59·6
4	79·2	72·8	74·0	73·1	66·6	75·2	84·3	78·7	80·8	82·5	65·3	*59·3*
5	69·4	67·5	69·4	77·4	76·0	77·3	81·2	*74·1*	80·3	81·5	68·2	74·9
6	*61·8*	67·5	67·8	77·0	72·4	81·9	82·4	76·1	78·6	71·1	71·2	72·2
7	68·1	72·0	68·5	77·8	80·0	76·8	83·3	83·4	79·7	71·0	72·8	76·8
8	65·0	63·7	*62·5*	75·7	67·7	76·3	80·1	86·7	84·9	77·8	71·8	78·3
9	70·9	72·4	67·8	72·0	*64·9*	77·5	80·0	80·5	78·8	73·3	74·3	80·7
10	65·7	71·3	62·9	76·4	71·4	76·2	72·9	85·0	72·8	78·9	78·3	74·2
11	62·7	63·3	63·0	75·1	75·5	69·1	78·0	85·0	81·5	73·7	73·9	74·7
12	71·3	73·0	62·8	76·9	76·2	73·9	*71·6*	83·4	79·9	72·1	76·3	68·3
13	72·3	65·9	69·6	75·0	74·5	78·2	82·3	83·9	81·3	70·9	63·2	74·2
14	65·6	65·0	70·7	75·9	74·7	77·6	77·4	83·9	76·3	76·7	73·6	77·5
15	66·1	65·4	73·9	69·1	74·5	78·0	76·0	80·3	78·3	79·5	75·4	73·8
16	67·8	63·9	76·8	68·8	82·2	77·4	81·6	82·7	78·3	80·1	70·1	75·2
17	66·8	63·8	77·5	72·9	81·6	69·7	82·7	82·9	82·0	80·6	64·6	77·1
18	70·8	69·8	77·4	73·0	81·7	81·1	82·0	80·6	77·3	85·0	72·0	77·7
19	71·0	68·8	73·9	76·5	74·5	73·9	74·6	79·6	75·4	85·0	65·8	77·4
20	70·4	59·4	72·5	75·4	71·5	79·9	79·4	81·7	*	83·1	77·5	72·5
21	64·5	70·7	75·1	66·8	78·8	84·2	80·5	82·6	81·1	73·5	69·1	78·5
22	67·3	66·7	68·1	66·5	73·1	83·9	84·2	83·9	78·2	82·1	*60·5*	81·3
23	67·2	67·8	65·9	77·0	68·5	73·0	83·4	83·5	78·3	78·0	68·6	72·2
24	73·4	59·3	65·4	72·8	78·4	73·7	80·9	80·7	71·5	75·7	76·3	79·9
25	72·9	64·8	69·9	71·8	80·3	77·5	80·3	84·1	71·1	74·4	76·8	72·7
26	69·4	*59·2*	68·1	70·8	75·6	72·2	77·0	86·5	68·7	76·4	74·7	74·1
27	68·0	60·6	72·5	70·9	77·8	81·9	75·6	79·9	*66·2*	*70·6*	70·2	70·6
28	72·8	70·8	71·4	72·8	79·5	83·9	72·0	80·8	71·2	71·8	69·0	76·0
29	73·0		64·7	70·8	79·0	85·1	81·1	83·6	76·7	75·0	70·6	71·0
30	65·3		74·3	*65·2*	75·9	73·5	76·2	82·9	74·7	75·4	68·4	68·6
31	69·0		78·1		76·1		74·5	78·3		71·5		72·2
Mean	69·5	*66·9*	70·2	73·0	74·6	77·4	79·2	*81·8*	77·5	76·5	70·9	73·5
						Year	74·3					

* Thermometer not put out.

The initial 2 or 3 of the readings is omitted, i.e. 275·0 degrees is printed 75·0.

The minimum "on the grass" refers to the interval from 18h. on the previous day to 7h. on the day to which it is entered.

Add 0·16° to obtain temperature in degrees Kelvin where $T(°K.) = t°C. + 273·16$.

POTENTIAL GRADIENT (reduced to level surface)
Mean values for periods of sixty minutes between exact hours, G.M.T.

99 ESKDALEMUIR 1942

	JANUARY, factor 4·52				FEBRUARY, factor 4·62				MARCH, factor 4·66			
	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.
						volts per metre						
1	225	260	Z-	135	290	235	120	-15	185	140	195	245
2	215	310	230	65	215	80	150	270	Z+	165	250	155
3	0	Z-	Z-	Z-	-80	150	255	255	235	435	435	(-375)
4	Z-	Z-	Z+	Z+	405	105	125	175	315	305	(660)	Z+
5	205	345	325	425	120	265	490	235	450	350	495	375
6	260	225	325	325	415	0	475	-340	-245	-225	560	500
7	370	225	470	370	-85	310	365	390	50	70	170	330
8	180	265	195	250	210	330	355	550	Z-	Z-	150	125
9	115	125	320	Z±	365	365	Z+	315	245	275	170	580
10	205	345	285	270	125	(-140)	-180	325	220	280	125	235
11	275	40	Z±	20	280	180	315	170	110	460	175	335
12	70	150	180	60	Z-	145	(-130)	350	135	215	260	80
13	105	610	425	Z+	185	330	225	310	95	310	475	550
14	510	250	335	300	175	530	275	435	315	165	405	355
15	225	525	590	Z+	365	375	215	340	Z±	325	90	395
16	505	510	170	320	180	395	265	430	250	355	165	-5
17	305	310	205	200	330	245	245	180	Z-	290	375	190
18	170	70	280	Z+	110	120	120	125	70	110	(415)	140
19	310	230	165	-315	90	160	265	280	120	250	50	-20
20	Z-	-15	-70	-35	165	545	290	40	70	265	Z-	385
21	300	-55	-85	60	105	85	135	155	440	305	70	320
22	125	105	-10	-35	120	80	145	325	460	(560)	120	230
23	-70	-395	Z-	(585)	135	90	160	265	140	265	210	310
24	180	185	Z±	(145)	360	205	280	350	230	215	200	255
25	10	(-290)	90	145	125	65	190	130	190	95	135	245
26	35	25	140	295	135	175	295	355	270	80	175	55
27	275	-15	Z±	330	170	90	Z-	350	40	180	70	20
28	Z-	175	150	215	265	315	(540)	325	30	20	125	200
29	(-415)	250	165	390					145	120	120	115
30	210	190	335	385					-40	175	220	380
31	(450)	145	445	(600)					120	155	Z±	120
(a)	224	245	277	268	218	221	266	286	197	243	244	268
(b)	214	196	220	228	190	209	249	242	173	221	231	227
Mean	(a) 253		(b) 215		(a) 248		(b) 223		(a) 238		(b) 213	

	APRIL, factor 4·65				MAY, factor 4·56				JUNE, factor 4·54			
	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.
						volts per metre						
1	35	140	(-25)	145	120	245	125	125	130	-280	180	50
2	100	175	150	195	60	150	125	95	(200)	165	55	200
3	140	Z-	Z-	Z-	60	95	105	90	355	380	175	130
4	405	160	200	Z-	70	150	160	305	-	235	160	225
5	135	Z-	Z-	110	150	100	85	185	300	185	250	240
6	Z±	Z-	Z+	165	205	200	90	110	140	200	100	190
7	Z+	Z-	Z±	95	80	45	115	235	145	135	145	195
8	Z-	90	Z-	210	90	175	190	160	150	140	175	205
9	345	Z-	145	-75	155	165	200	155	110	165	60	130
10	Z-	110	140	165	100	140	175	170	70	75	90	175
11	135	145	370	155	75	45	70	45	85	235	140	235
12	150	190	200	365	45	15	120	135	20	-15	90	80
13	220	265	305	325	105	135	190	130	145	120	-245	-155
14	190	180	195	460	90	190	130	125	-235	60	5	30
15	310	175	210	325	120	150	70	90	-55	160	105	150
16	235	270	145	140	Z-	210	210	180	70	130	130	200
17	465	230	325	325	130	205	175	-30	100	195	125	105
18	240	190	240	175	Z-	395	130	270	110	45	115	230
19	210	120	120	-55	170	335	Z-	155	75	140	140	320
20	260	(70)	70	200	110	60	80	145	50	265	125	110
21	135	160	105	190	240	125	95	175	210	(205)	(190)	60
22	105	250	135	170	105	Z-	Z-	290	-	90	140	255
23	75	Z-	Z-	120	115	140	-70	Z-	130	125	145	150
24	60	100	115	115	70	110	Z-	95	100	95	130	175
25	160	160	150	220	Z-	Z-	Z±	140	165	110	125	155
26	145	160	150	200	Z±	185	Z±	Z-	180	220	90	115
27	105	170	175	180	Z+	Z+	145	Z±	165	140	140	165
28	135	125	140	195	Z-	Z±	185	105	150	165	195	140
29	50	210	170	195	(220)	Z-	Z±	130	85	160	235	325
30	75	160	125	335	430	140	Z±	190	105	160	160	225
31					(20)	(40)	Z+	180				
(a)	178	167	177	211	125	152	135	156	137	161	135	171
(b)	168	174	170	217	111	133	128	136	117	139	120	155
Mean	(a) 183		(b) 182		(a) 142		(b) 127		(a) 151		(b) 133	

The potential gradient is reckoned as positive if the potential increases upwards. For indeterminate potential gradient the following notation is used: Z+, indeterminate, positive value; Z-, indeterminate, negative value; Z±, indeterminate, in magnitude and sign.

(a) Mean of all positive readings. (b) Mean from all complete days using both positive and negative readings.

POTENTIAL GRADIENT (reduced to level surface)
Mean values for periods of sixty minutes between exact hours, G.M.T.

99 ESKDALEMUIR 1942

	JULY, factor 4·73				AUGUST, factor 4·88				SEPTEMBER, factor 4·97			
	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.
						volts per metre						
1	165	165	155	200	95	90	110	105	175	160	175	(Z-)
2	110	165	135	120	95	155	170	210	80	135	195	310
3	55	145	(140)	130	80	40	150	165	70	Z±	155	(40)
4	120	120	215	190	265	185	125	135	-	-	185	20
5	140	220	Z±	200	130	155	135	155	Z-	Z-	145	265
6	120	140	125	125	165	165	150	300	170	135	155	215
7	150	(-20)	145	190	70	185	110	145	(50)	(115)	Z-	150
8	210	185	Z-	195	110	Z-	140	70	210	310	265	245
9	180	150	125	240	30	205	135	65	185	225	145	200
10	215	145	150	(-30)	(-20)	(55)	-	-	95	265	175	565
11	120	190	140	220	-	100	50	165	385	300	(215)	-
12	125	170	145	190	60	180	-55	295	-	-	-5	(55)
13	235	Z-	100	175	250	250	160	350	-	-	205	395
14	140	120	Z±	250	300	295	185	180	60	105	60	255
15	240	165	170	200	(155)	225	135	235	185	Z+	180	50
16	130	90	120	150	130	125	145	195	125	165	235	Z-
17	160	-20	Z-	195	60	75	35	125	165	105	290	360
18	120	155	165	105	230	190	200	155	445	175	215	350
19	30	165	210	340	135	210	(40)	(65)	275	230	185	265
20	85	125	165	275	-	-	(55)	0	210	Z-	-20	Z±
21	185	140	60	85	80	-	70	265	70	125	Z-	240
22	115	Z-	Z±	Z-	220	320	120	245	165	155	235	(15)
23	45	220	55	340	75	125	85	145	85	100	Z-	220
24	60	165	140	165	130	100	75	-30	225	215	165	175
25	85	55	Z±	165	40	245	70	65	Z+	130	125	215
26	195	120	135	300	65	180	140	(-)	135	155	115	(60)
27	200	185	170	335	(-)	(590)	215	220	-	-	-	-
28	30	180	180	Z-	185	175	180	320	-	-	190	165
29	375	Z-	215	375	(140)	(-)	(110)	0	-20	165	120	30
30	70	160	140	205	30	40	45	Z-	185	190	165	115
31	190	305	305	290	125	245	85	300				
(a)	142	159	152	213	128	182	118	173	170	174	179	199
(b)	132	153	150	198	137	179	115	178	170	183	177	226
Mean	(a) 167		(b) 158		(a) 150		(b) 152		(a) 181		(b) 189	

	OCTOBER, factor 5·01				NOVEMBER, factor 4·74				DECEMBER, factor 4·74* 4·87†			
	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.
						volts per metre						
1	-75	Z-	75	(45)	235	145	105	210	190	80	270	455
2	-	-	135	210	105	45	130	95	180	130	250	350
3	120	70	190	150	155	75	140	70	350	345	340	290
4	75	110	185	250	165	360	395	245	80	190	260	Z-
5	-55	90	155	210	255	365	145	430	-325	125	205	410
6	95	85	145	-	190	395	95	Z-	210	420	225	Z-
7	-	-	110	230	125	295	145	270	60	75	40	-20
8	10	140	Z±	115	345	145	95	305	120	135	335	40
9	60	210	Z-	-275	395	185	180	170	80	155	35	Z-
10	75	85	Z-	Z-	75	155	80	50	75	295	Z-	Z-
11	130	145	280	490	120	270	195	300	95	230	425	425
12	285	Z-	Z-	470	Z-	145	430	320	450	485	620	455
13	265	350	330	520	155	270	325	400	0	140	195	215
14	45	140	-	-	270	200	340	270	225	275	325	515
15	55	(5)	Z-	Z-	130	125	215	320	70	-65	220	(40)
16	Z-	-	45	Z-	230	415	180	265	(50)	-	-170	375
17	55	230	85	60	125	175	305	235	230	Z-	Z-	315
18	75	110	145	75	130	215	190	465	500	480	-10	145
19	370	295	255	345	570	405	160	190	75	195	Z-	335
20	120	150	130	295	90	110	165	335	345	165	280	Z-
21	175	260	305	175	45	75	215	165	Z-	115	200	185
22	130	235	180	100	100	145	190	295	10	100	165	130
23	95	220	175	260	105	175	560	545	455	245	125	65
24	205	40	Z±	Z-	85	285	265	450	100	80	65	290
25	120	80	75	Z-	205	445	165	230	110	55	245	500
26	Z-	Z-	Z-	470	125	160	180	305	155	195	115	520
27	110	Z-	Z-	Z-	310	270	200	Z+	75	165	295	240
28	280	535	(360)	750	145	70	280	340	195	260	-10	Z+
29	400	75	130	Z-	120	40	60	170	80	140	150	245
30	85	125	175	185	150	610	660	Z-	95	210	485	30
31	260	230	185	260					90	140	325	295
(a)	148	167	175	270	181	226	226	276	164	201	248	286
(b)	145	210	209	276	177	206	208	274	147	180	247	268
Mean	(a) 190		(b) 210		(a) 227		(b) 216		(a) 225		(b) 211	

The factor used for converting the potential at the collector to potential gradient in volts per metre in the open is given for each month.

Annual means				
(a)	168	191	194	231
(b)	157	182	185	219
	(a) 196		(b) 186	

POTENTIAL GRADIENT(reduced to level surface): DIURNAL INEQUALITIES

The departures from the mean of the day are adjusted for non-cyclic change†

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	Hour G.M.T. 0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Non-cyclic change†	No. of days used	Mean
	volts per metre																										v./m.
	0a days only*																										
Jan.	+7	-56	-24	-44	*-102*	-99	-93	-68	-23	-80	-25	-33	+16	+33	+62	+37	*+99*	+91	+73	+58	+84	+20	+31	+28	-52	5	275
Feb.	-4	-46	*-66*	-42	-35	-5	-19	-12	-18	-26	-6	+3	+3	-1	0	+12	+34	+36	+27	+18	+37	*+52*	+35	+19	-3	12	273
Mar.	-21	-18	-58	-48	-50	-49	-33	+26	+72	+55	+35	-20	-22	-62	*-78*	-69	-39	+24	*+76*	+68	+59	*+78*	+58	+12	33	7	285
Apr.	0	+2	-19	-17	-23	-10	+3	-4	-11	-8	-13	-25	*-26*	-25	-21	-16	-1	+9	+19	+52	*+54*	+44	+34	+4	-1	17	190
May	+4	-9	-32	*-35*	-22	-4	-3	+3	+9	-3	+3	-3	-6	-6	-1	+7	+2	+7	+13	*+19*	+17	+15	+13	+3	-22	12	144
June	-7	-18	-22	-31	*-32*	-31	-13	+19	+18	+15	+17	+4	-3	-6	-16	-5	-5	-5	-11	+24	+34	*+45*	+28	+10	+25	16	145
July	-19	-29	*-38*	-37	-7	+3	+19	+6	+18	+15	-4	-9	-14	-15	-1	-13	-29	-13	-5	+20	*+66*	+53	+29	-8	+28	7	178
Aug.	+16	-17	-14	-10	-14	-33	+2	-12	-13	+10	*-34*	-28	-2	-2	-12	+11	+17	+37	*+40*	+39	+24	+5	+1	-7	-34	6	164
Sept.	-6	-12	+6	+11	-29	-5	+42	+14	+38	+35	-19	-48	-28	-11	-15	*-57*	-46	-33	-18	+34	*+65*	+21	+44	+12	+97	5	203
Oct.	+20	-14	-19	-57	-38	-44	-23	+20	-1	*-61*	-28	-16	-15	-56	-14	-30	+9	+49	+71	+46	*+128*	+103	-2	-36	-93	3	280
Nov.	-17	-43	-43	-47	*-53*	-17	-6	-6	+38	-9	-33	-43	-46	-38	-16	+28	-11	+24	+83	*+107*	+72	+51	+17	+13	-40	11	243
Dec.	-6	-29	-19	*-63*	-57	-44	-32	-15	-31	-34	-28	-9	+10	-15	+9	+43	+2	+28	+61	+13	+29	*+93*	+68	+25	-51	5	228
Year	-3	-24	-29	-35	*-39*	-28	-13	-2	+8	-8	-11	-19	-11	-17	-9	-4	+3	+21	+36	+41	*+56*	+48	+30	+6	-	-	217
Winter	-5	-43	-38	-49	*-62*	-41	-37	-25	-9	-37	-23	-21	-4	-5	+14	+30	+31	+45	*+61*	+49	+55	+54	+38	+21	-	-	255
Equinox	-2	-11	-23	-28	-35	-27	-3	+14	+25	+5	-6	-27	-23	-39	-32	*-43*	-19	+12	+37	+50	*+77*	+61	+33	-2	-	-	239
Summer	-1	-18	-27	*-28*	-19	-16	+1	+4	+8	+9	-5	-9	-6	-7	-7	0	-4	+7	+9	+25	*+35*	+29	+18	-1	-	-	158
	1a and 2a days only*																										
Jan.	-64	-113	+48	*+94*	-25	+5	+16	*-120*	+83	-81	-28	-53	-7	+3	+23	+19	+15	+54	+49	+80	+53	+84	-22	-116	-222	1	-9
Feb.	+19	+23	-56	-70	*-72*	-44	-57	-35	+5	+19	+25	*+49*	+31	+18	-11	+21	+43	+23	-24	+8	-15	+30	+33	+40	+43	7	217
Mar.	+32	+23	+5	-22	-34	-6	-9	-10	-12	-41	*-46*	-42	-31	+7	+2	-17	+21	*+37*	+30	+34	+20	+10	+29	+27	-25	10	159
Apr.	+46	-6	0	-9	-42	-28	-53	-18	-44	-20	+25	+4	+17	+50	+48	*+57*	+43	+34	+55	+27	*-102*	-47	-35	+2	0	3	195
May	+24	-5	-17	-51	-21	-30	-5	-20	*-54*	-37	-15	-9	-8	+1	-3	-3	+10	+1	*+56*	+38	+38	+29	+41	+40	+12	4	98
June	+48	+6	-29	-18	-24	-21	+2	+32	-38	-24	+18	-4	-28	-37	-12	*-53*	+6	-7	+17	+15	+43	+13	+37	*+51*	-44	3	115
July	-15	-27	*-30*	-18	-23	-18	-17	+8	+7	+13	-25	-24	-25	-24	-22	-12	+17	*+56*	+53	+36	+46	+30	+25	-18	-25	6	150
Aug.	+11	-30	-22	-25	*-52*	-5	0	+8	+18	0	-9	+4	+15	-17	-48	-50	-32	+25	+43	*+49*	+46	+36	+24	+17	-15	9	145
Sept.	-62	*-72*	-16	-3	-50	-55	-15	+3	+9	+2	-7	-19	-58	+3	+24	+23	+27	+80	+85	*+87*	+42	+1	-5	-28	+22	4	151
Oct.	*-59*	-58	-58	-39	-26	-9	-4	+48	+17	-2	-13	-23	-22	-20	+4	+5	+14	+44	+40	+38	*+51*	+47	+27	-7	+58	9	197
Nov.	-29	-12	-24	-75	*-113*	-69	-71	-102	-65	-74	-63	-37	-61	-13	+28	+61	+36	+94	*+154*	+129	+97	+85	+67	+45	+20	9	202
Dec.	+11	+3	-22	-76	*-150*	-88	-76	-53	-58	-63	-54	-15	+6	-3	-34	+15	+86	+132	+142	*+165*	+137	+43	-32	-16	+173	4	203
Year	-3	-22	-18	-26	*-53*	-31	-24	-22	-11	-26	-16	-14	-14	-3	0	+5	+24	+48	+58	*+59*	+38	+30	+16	+3	-	-	152
Winter	-16	-25	-13	-32	*-90*	-49	-47	-77	-9	-50	-30	-14	-8	+1	+1	+29	+45	+76	+80	*+95*	+68	+61	+11	-12	-	-	153
Equinox	-11	-28	-17	-18	*-38*	-25	-20	+6	-7	-15	-10	-20	-23	+10	+19	+17	+26	+49	*+53*	+47	+3	+3	+4	-1	-	-	175
Summer	+17	-14	-25	-28	*-30*	-19	-5	+7	-17	-12	-8	-8	-11	-19	-21	-29	0	+19	+42	+35	*+43*	+27	+32	+23	-	-	127

Winter: January, February, November, December
Equinox: March, April, September, October
Summer: May to August.

* For explanation of 0a, 1a, 2a days see p. 90, *Observatories' Year Book*, 1938.

† See p. 10, *Observatories' Year Book*, 1938.

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	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE	
	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient
		hr.		hr.		hr.		hr.		hr.		hr.
1	1b	2·7	2b	4·4	0a	···	2b	2·6	0a	···	2b	6·7
2	1b	1·2	2b	3·4	0a	···	0a	···	0a	···	0a	···
3	2c	13·8	2c	9·7	2b	3·8	2c	14·7	0a	···	0a	···
4	2c	9·4	1a	0·2	2c	4·6	2c	8·3	0a	···	0a	···
5	0a	···	0a	···	1b	0·2	2c	9·6	0a	···	1b	0·9
6	0a	···	1b	2·5	2b	10·1	2c	6·0	0a	···	0a	···
7	0a	···	1a	0·8	1a	0·1	2c	8·9	1a	0·5	1b	0·4
8	1b	0·3	0a	···	2c	6·6	2c	8·1	0a	···	1b	0·8
9	1b	0·1	1b	0·5	0a	···	2b	4·7	0a	···	0a	···
10	1b	0·1	2c	6·7	0a	···	2b	3·0	0a	···	0a	···
11	2b	4·9	0a	···	0a	···	1a	0·1	1a	1·8	0a	···
12	2b	4·3	2c	4·4	1a	0·1	0a	···	1a	0·4	1a	3·7
13	1a	0·1	1a	0·1	0a	···	0a	···	0a	···	2c	14·1
14	0a	···	0a	···	1a	0·1	0a	···	0a	···	2c	10·0
15	0a	···	0a	···	2b	4·7	0a	···	2b	3·5	1b	2·1
16	0a	···	0a	···	2b	6·1	0a	···	2b	3·8	0a	···
17	0a	···	0a	···	2b	5·7	0a	···	2c	6·1	0a	···
18	1b	0·5	0a	···	1b	2·6	1a	0·1	2b	4·6	1a	0·1
19	2b	6·5	0a	···	1a	2·8	1a	0·6	2c	6·3	0a	···
20	2b	14·2	1a	0·2	2b	3·8	0a	···	1a	0·8	0a	···
21	2b	18·0	1a	0·3	1a	0·3	0a	···	0a	···	1b	1·9
22	2a	14·2	1a	0·5	0a	···	0a	···	2b	3·1	1b	0·3
23	2c	12·4	0a	···	0a	···	2c	9·0	2c	9·3	0a	···
24	2c	3·4	0a	···	0a	···	0a	···	2b	4·5	0a	···
25	2b	5·6	1a	0·1	1a	0·2	0a	···	2c	13·4	0a	···
26	1b	1·1	0a	···	1a	0·1	0a	···	2c	6·3	1a	0·2
27	2c	6·8	2c	3·3	1a	1·9	0a	···	2c	6·6	0a	···
28	1b	2·4	0a	···	1a	0·3	0a	···	2c	7·2	0a	···
29	1b	2·9			1a	0·3	0a	···	2c	8·7	0a	···
30	0a	···			2b	5·9	0a	···	1b	2·0	0a	···
31	1a	0·6			2c	7·2			1b	0·5		
Total	-	125·5	-	37·1	-	67·5	-	75·7	-	89·4	-	41·2
No. of days used	-	31	-	28	-	31	-	30	-	31	-	30
Mean	-	4·0	-	1·3	-	2·2	-	2·5	-	2·9	-	1·4

	JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER	
	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient
		hr.		hr.		hr.		hr.		hr.		hr.
1	0a	···	0a	···	1b	0·9	2b	3·5	0a	···	1b	2·9
2	1a	0·6	0a	···	0a	···	(0a)	(···)	1b	2·3	0a	···
3	1b	1·5	1a	0·2	1b	2·5	1a	0·8	1b	2·7	0a	···
4	1b	1·6	0a	···	2b	3·5	2b	3·2	0a	···	2b	6·1
5	1b	0·6	0a	···	2c	9·3	1a	2·2	0a	···	2c	6·9
6	1b	1·6	0a	···	1a	0·9	(1a)	(0·3)	2b	5·7	1b	2·2
7	1b	3·0	1a	0·5	2c	6·1	(1a)	(0·6)	1b	0·6	2b	4·5
8	2c	3·5	2c	7·1	0a	···	2c	4·4	1a	0·8	2b	4·5
9	1b	1·5	1b	-	1a	0·1	2c	12·6	1a	0·1	2b	6·9
10	1b	1·9	(2c)	-	0a	···	2c	4·1	1b	1·9	2c	12·6
11	0a	···	(2c)	-	(0a)	(···)	1a	0·2	1b	1·7	2b	3·0
12	0a	···	1a	1·4	(2a)	4·9	2c	5·3	2b	4·2	1b	0·6
13	1b	1·7	1a	0·1	(0a)	(···)	0a	···	1a	0·1	2b	3·3
14	1b	1·4	1a	0·1	1b	1·0	1b	(1·8)	0a	···	1b	0·5
15	1a	0·9	1b	1·0	1b	2·2	(2b)	(7·6)	1a	0·1	2b	5·3
16	1b	1·7	1a	0·1	1b	2·1	2b	(3·1)	0a	···	2b	5·3
17	2b	4·5	1a	1·8	1a	0·1	1a	0·6	0a	···	2c	7·7
18	1a	0·1	0a	···	1b	2·1	1b	1·1	0a	···	1b	2·0
19	0a	···	1a	0·9	0a	···	0a	···	0a	···	2c	5·3
20	1a	0·1	(1b)	1·9	2c	5·9	1a	0·1	1a	0·4	2b	5·4
21	1a	0·4	1b	2·0	2b	3·9	1a	0·1	1a	0·9	2b	3·4
22	2c	7·7	1b	0·8	1b	1·3	1a	0·4	0a	···	1b	2·3
23	1a	0·7	1a	0·1	2c	4·6	1b	1·1	1a	0·1	0a	···
24	2b	3·9	1a	1·1	1b	2·4	2c	7·1	0a	···	1a	0·6
25	1b	2·3	2b	3·5	2c	5·3	2c	7·7	0a	···	1a	2·4
26	1b	1·7	1b	0·2	0a	···	2c	15·9	1b	1·0	1a	0·1
27	0a	···	0a	···	0a	···	2c	15·9	1b	0·7	0a	···
28	2b	5·3	0a	···	1a	0·3	(1a)	(0·1)	1a	0·5	2c	3·6
29	1b	1·3	2a	3·4	2a	3·2	2b	5·8	1a	2·0	0a	···
30	0a	···	2b	6·0	0a	···	1a	1·3	2b	3·2	1b	1·8
31	0a	···	1b	0·4			0a	···			1a	0·1
Total	-	49·5	-	32·6	-	62·6	-	106·9	-	29·0	-	99·3
No. of days used		31		28		30		31		30		31
Mean		1·6		1·2		2·1		3·4		1·0		3·2

Annual values: Character frequency 0 1 2
No. of days used 121 139 105

Duration: Total 816·3 hr.
No. of days 362
Mean 2·25 hr.

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

102 ESKDALEMUIR (H) — 16,000γ (0·16 C.G.S. unit) + — JANUARY 1942

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1 q	518	518	519	519	523	527	530	529	528	526	525	518	520	523	528	528	530	535	531	530	523	522	526	522	*525*
2	524	527	527	531	538	542	549	542	539	530	530	523	520	520	519	519	508	504	514	495	485	487	495	503	520
3 d	509	515	510	507	514	518	521	514	509	506	502	493	502	506	506	488	513	509	502	493	492	491	496	494	505
4 d	501	502	501	513	546	522	527	527	514	511	509	504	503	505	486	501	502	499	499	480	486	470	470	495	503
5 d	500	491	506	488	514	514	514	502	495	479	478	498	508	506	509	498	497	492	521	494	502	505	503	536	*502*
6	502	502	505	509	513	518	510	511	506	504	495	506	506	509	510	505	506	502	515	507	507	511	542	515	509
7	515	498	502	507	516	506	521	521	519	513	502	493	494	510	514	513	517	513	510	519	520	513	510	510	511
8	517	514	515	517	518	520	518	518	517	513	509	506	507	511	511	507	510	514	518	520	518	518	518	529	515
9	523	522	518	527	528	527	525	521	522	513	509	506	507	514	519	521	515	514	518	521	520	518	518	516	518
10	530	512	513	520	522	522	520	525	522	517	514	511	517	515	510	514	502	502	514	516	514	515	523	512	516
11	513	517	515	518	521	526	520	522	510	511	508	507	498	511	517	514	511	506	506	509	516	518	515	517	514
12	518	514	518	517	521	522	523	523	517	502	502	507	513	518	518	514	513	506	513	510	513	513	519	514	515
13	517	515	515	515	518	525	526	522	517	511	507	499	498	507	511	519	515	514	512	511	517	521	518	519	515
14	521	522	522	525	525	529	530	532	525	518	513	513	516	521	522	523	526	529	529	525	529	518	534	523	524
15	514	511	514	515	517	517	529	529	524	513	516	516	518	521	514	503	509	516	518	518	513	513	511	509	516
16	503	513	513	514	518	522	525	525	523	514	505	498	501	504	504	499	497	487	491	483	486	503	507	502	506
17 d	497	515	505	516	521	533	525	502	479	477	466	484	500	510	505	499	505	513	517	520	519	517	518	517	507
18 d	513	507	477	507	502	510	521	520	502	509	504	505	504	509	504	512	515	522	522	522	506	514	499	480	508
19	491	498	502	510	520	527	521	516	509	503	497	495	506	509	510	511	514	516	517	514	510	507	507	522	510
20	508	511	507	512	517	518	517	513	509	505	501	498	506	509	513	513	510	513	513	514	514	510	518	513	511
21 q	514	514	514	517	518	521	521	518	518	518	521	518	515	521	518	518	518	524	511	514	509	509	510	515	515
22	516	517	514	516	526	529	527	530	525	514	511	506	507	491	492	493	497	495	491	491	495	498	498	509	508
23	506	502	509	517	516	520	527	526	525	515	507	503	522	529	503	502	507	514	520	520	518	517	513	514	515
24 q	511	510	513	517	518	521	522	522	524	522	510	506	506	517	522	522	525	526	526	529	527	523	515	511	519
25	513	517	518	521	522	525	525	526	518	510	506	502	506	518	534	531	534	525	525	511	510	519	515	514	519
26 q	513	515	510	510	514	518	522	519	518	506	501	500	509	517	522	522	525	522	522	522	517	513	516	518	515
27	518	518	518	518	522	525	525	522	517	505	510	511	517	524	525	522	521	514	517	521	513	517	509	507	517
28	509	513	514	525	522	525	514	530	522	513	495	503	506	500	509	507	509	512	514	512	510	506	514	514	512
29	513	514	514	514	517	518	521	518	518	514	500	500	512	516	522	528	520	516	516	500	494	501	503	507	512
30	506	506	511	514	514	525	526	525	522	521	519	521	521	525	529	530	533	529	529	529	526	520	519	520	522
31 q	521	519	518	522	522	525	529	530	529	522	517	516	516	518	520	526	526	527	527	527	529	526	524	523	523
Mean	512	512	511	515	520	523	*524*	522	517	511	506	*505*	509	513	514	513	514	513	515	512	511	511	512	513	514

MAGNETIC DECLINATION (WEST)

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

103 ESKDALEMUIR (D) — 12° + — JANUARY 1942

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1 q	44·2	44·2	44·2	44·2	44·2	44·4	44·2	43·7	43·9	43·8	44·9	45·9	45·8	46·6	46·0	45·1	44·9	45·0	44·8	44·5	43·7	43·6	43·6	44·1	44·6
2	44·4	44·5	44·5	45·0	46·2	44·8	44·5	44·6	44·8	45·1	45·4	45·5	46·5	50·3	51·5	52·4	56·7	56·0	48·7	42·3	39·5	39·8	38·8	40·4	*45·9*
3 d	43·1	46·3	45·2	44·8	43·9	43·7	44·6	44·6	45·7	46·5	47·2	46·6	46·0	47·6	48·8	50·1	47·5	47·5	46·6	45·1	43·8	42·1	41·2	39·9	45·3
4 d	41·3	42·1	43·1	40·5	36·8	41·5	44·5	45·2	43·1	43·9	45·1	46·0	48·9	48·7	45·9	46·0	49·0	45·9	44·7	43·0	40·8	33·1	32·0	37·8	42·9
5 d	42·5	42·3	42·5	44·9	45·0	45·1	45·8	45·8	46·7	49·4	48·1	45·9	47·5	48·1	46·9	45·2	44·9	46·0	41·2	38·0	42·6	43·2	41·2	43·4	44·7
6	43·2	43·1	44·0	44·3	44·4	44·2	43·4	44·1	44·2	45·0	44·9	44·2	46·1	46·9	46·9	45·0	47·0	44·9	33·4	42·8	43·5	39·4	37·0	39·7	43·4
7	39·8	41·2	40·4	44·5	42·3	43·2	43·2	43·4	43·8	44·1	44·7	44·4	45·9	46·3	45·8	44·1	43·5	44·2	44·0	41·2	41·6	43·3	43·2	43·3	43·4
8	43·7	44·1	43·5	43·6	44·0	44·1	44·1	43·9	43·3	43·5	44·2	44·9	46·2	46·3	46·1	44·9	45·1	44·8	44·8	44·5	43·9	43·3	43·2	43·4	44·3
9	42·1	42·6	43·3	44·5	43·0	42·5	43·3	43·4	43·4	43·5	44·1	44·9	46·0	46·2	45·7	45·0	45·2	45·2	45·7	45·1	44·8	43·4	43·1	39·5	44·0
10	35·9	40·4	42·3	43·2	43·4	44·2	43·7	44·3	44·1	44·4	45·5	46·2	47·7	46·9	45·9	45·6	43·4	43·4	45·2	44·5	43·2	40·0	38·6	43·9	43·6
11	44·4	47·2	43·3	42·5	43·3	43·4	43·9	44·2	44·4	45·3	46·3	47·6	47·7	48·0	45·8	45·0	44·9	45·1	44·8	42·2	40·0	40·5	42·4	43·6	44·4
12	43·9	44·6	43·1	43·9	42·6	42·7	43·2	43·2	43·2	43·8	45·2	46·3	47·0	47·1	45·8	45·9	45·0	44·4	44·1	44·2	35·8	40·5	43·3	43·4	43·8
13	44·3	44·2	44·0	44·0	44·1	43·6	43·6	43·7	43·4	42·4	43·9	45·5	47·5	48·1	46·7	45·0	44·3	44·2	43·0	44·0	43·2	43·4	43·3	44·0	44·3
14	44·1	44·5	44·2	44·0	44·2	44·2	44·0	43·5	42·6	43·1	43·4	45·1	46·8	46·8	46·0	45·3	45·1	45·8	45·3	45·1	44·9	43·4	39·9	39·4	44·2
15	42·5	42·7	43·0	42·5	42·5	42·4	42·5	42·3	42·3	43·5	44·9	47·5	49·1	49·8	51·3	52·7	47·7	45·2	44·9	44·7	43·9	42·4	42·3	44·5	44·9
16	42·6	41·4	40·2	40·7	41·7	42·5	42·3	43·0	43·3	44·3	45·8	48·0	50·6	51·2	50·2	52·3	52·4	52·4	45·8	41·2	36·6	41·7	43·5	42·4	44·8
17 d	42·6	39·7	41·4	42·7	44·4	43·3	46·7	48·6	52·5	49·1	53·3	50·5	49·0	49·4	47·0	45·7	44·9	44·9	44·0	43·4	43·2	42·7	43·3	43·4	45·7
18 d	43·3	41·3	42·0	35·0	40·4	42·1	43·4	44·4	45·0	45·8	43·4	44·9	46·7	46·2	45·0	43·9	44·3	44·9	45·1	45·1	43·4	36·8	28·7	36·9	*42·4*
19	43·2	45·9	45·0	41·5	45·7	51·2	47·3	44·1	44·0	45·3	44·2	44·9	46·1	46·1	44·2	43·3	43·9	44·2	44·0	43·3	42·5	42·4	41·4	39·4	44·3
20	43·5	45·1	43·2	43·9	43·4	43·4	43·3	43·1	43·0	43·8	44·9	46·7	47·6	47·4	45·8	44·3	44·1	43·4	44·0	43·3	43·2	41·6	43·4	43·3	44·1
21 q	43·4	43·6	43·8	43·7	43·7	43·4	43·2	43·2	43·6	44·3	45·2	45·6	45·1	45·0	44·2	44·0	44·1	44·0	44·3	44·1	42·9	40·7	42·2	43·1	43·8
22	43·3	43·9	43·3	44·5	42·5	41·5	41·4	42·5	43·3	44·0	45·2	46·1	48·6	48·8	49·6	49·4	47·0	45·6	44·4	41·3	39·5	37·6	37·6	39·3	43·8
23	38·0	40·4	43·0	43·2	43·4	44·0	43·4	43·3	44·2	44·2	45·9	46·7	46·9	48·1	48·1	48·5	46·7	45·8	44·9	44·0	43·2	42·5	42·6	41·3	44·3
24 q	41·3	42·2	43·2	43·3	43·4	43·4	43·3	43·0	43·1	43·2	44·3	45·1	45·1	45·9	45·9	45·8	45·3	45·1	45·0	44·9	44·1	42·2	38·4	40·4	43·6
25	42·1	43·1	43·3	43·3	43·3	43·4	43·4	43·3	43·1	43·0	45·1	46·0	47·0	48·4	47·1	45·1	45·1	44·4	44·3	44·6	43·0	43·4	43·4	42·5	44·2
26 q	41·5	41·7	42·1	41·5	40·8	41·3	42·3	42·5	41·8	41·4	43·5	46·0	47·7	47·6	47·3	45·9	45·7	45·1	44·5	44·4	44·3	43·3	42·4	42·5	43·6
27	43·1	43·3	43·3	43·3	43·4	43·2	43·2	42·5	42·4	43·1	44·1	45·7	47·8	47·7	46·8	46·7	46·8	47·1	45·2	44·3	43·4	42·6	42·0	39·4	44·2
28	39·7	40·7	38·8	40·5	39·3	39·6	42·1	44·0	42·2	43·1	44·9	48·6	49·9	50·7	49·4	47·2	44·3	43·5	43·5	43·4	40·1	41·5	42·7	42·4	43·4
29	42·3	42·4	43·1	43·2	42·2	42·5	43·0	42·4	41·7	41·8	43·2	44·9	46·3	47·4	47·3	45·9	44·7	45·2	46·1	46·2	43·5	40·7	40·9	39·3	43·6
30	41·1	39·7	39·5	40·0	40·2	40·7	41·6	42·4	42·5	43·2	44·2	46·5	49·4	49·6	50·2	48·6	49·5	49·3	46·0	43·7	44·3	43·8	42·0	41·8	44·2
31 q	42·3	43·2	43·2	43·3	43·3	44·1	43·9	43·0	42·2	42·7	43·4	44·9	45·7	46·3	45·9	45·7	45·8	45·4	44·7	43·9	43·5	43·2	43·1	43·3	44·0
Mean	42·3	42·9	42·9	42·9	42·9	43·3	43·6	43·7	43·8	44·2	45·1	46·1	47·3	*47·7*	47·1	46·4	46·1	45·7	44·4	43·6	42·5	41·5	*41·0*	41·7	44·1

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

104 ESKDALEMUIR (V) — 44,000γ (0·44 C.G.S. unit) + — JANUARY 1942

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1 q	1062	1062	1061	1061	1058	1056	1056	1055	1056	1056	1056	1057	1057	1060	1061	1061	1059	1058	1057	1058	1060	1061	1059	1060	1059
2	1058	1057	1057	1055	1053	1051	1047	1049	1050	1052	1052	1055	1055	1055	1060	1068	1074	1085	1088	1097	1103	1096	1094	1085	1067
3 d	1078	1070	1068	1068	1065	1057	1043	1037	1037	1044	1049	1054	1053	1059	1068	1079	1076	1071	1075	1085	1090	1092	1085	1078	1066
4 d	1069	1067	1062	1051	1033	1037	1044	1045	1050	1055	1057	1061	1058	1063	1083	1088	1081	1080	1081	1104	1105	1098	1093	1075	*1068*
5 d	1067	1065	1048	1043	1043	1051	1055	1056	1057	1061	1067	1067	1066	1067	1074	1081	1082	1085	1091	1073	1070	1067	1067	1052	1065
6	1056	1061	1062	1059	1055	1051	1055	1055	1055	1061	1063	1061	1058	1062	1067	1070	1071	1076	1078	1067	1064	1067	1055	1046	1061
7	1045	1052	1057	1056	1056	1058	1057	1056	1054	1054	1056	1055	1056	1058	1066	1070	1068	1067	1064	1064	1061	1060	1061	1061	1059
8	1057	1057	1057	1060	1061	1060	1060	1058	1056	1057	1059	1060	1061	1061	1063	1064	1063	1062	1061	1060	1060	1058	1058	1056	1060
9	1056	1055	1056	1054	1052	1053	1054	1055	1055	1060	1061	1060	1059	1061	1063	1063	1063	1062	1062	1062	1061	1062	1061	1061	1059
10	1053	1051	1054	1055	1055	1055	1055	1055	1055	1058	1059	1060	1057	1056	1061	1064	1069	1073	1067	1064	1064	1064	1060	1056	1059
11	1055	1046	1048	1052	1055	1055	1055	1055	1056	1055	1054	1053	1055	1057	1061	1061	1062	1063	1067	1068	1064	1062	1061	1057	1057
12	1055	1055	1053	1054	1054	1054	1055	1055	1056	1060	1057	1057	1057	1058	1060	1061	1062	1063	1063	1066	1072	1064	1058	1057	1059
13	1055	1055	1055	1056	1056	1056	1056	1056	1056	1062	1063	1063	1061	1057	1057	1059	1058	1060	1062	1063	1063	1061	1060	1057	1059
14	1056	1054	1052	1052	1052	1051	1052	1051	1055	1056	1056	1055	1052	1055	1056	1054	1054	1052	1055	1055	1056	1061	1057	1054	1054
15	1055	1056	1057	1057	1056	1056	1051	1049	1050	1051	1051	1055	1055	1060	1063	1066	1067	1067	1064	1062	1063	1065	1067	1062	1059
16	1061	1061	1061	1058	1055	1053	1051	1050	1050	1053	1055	1056	1058	1063	1067	1072	1079	1090	1100	1102	1102	1084	1072	1068	1068
17 d	1064	1049	1055	1052	1054	1051	1046	1046	1048	1057	1064	1067	1068	1071	1070	1073	1069	1063	1062	1061	1061	1061	1061	1061	1060
18 d	1054	1050	1047	1040	1048	1049	1049	1046	1049	1047	1049	1048	1050	1054	1057	1056	1055	1054	1054	1053	1059	1055	1050	1045	1051
19	1033	1023	1024	1039	1035	1008	1017	1029	1036	1039	1044	1048	1051	1056	1059	1059	1059	1056	1054	1054	1054	1054	1054	1046	*1043*
20	1047	1039	1047	1050	1051	1051	1051	1051	1052	1055	1054	1055	1056	1054	1056	1057	1058	1059	1056	1054	1054	1054	1048	1049	1052
21	1051	1052	1053	1053	1054	1053	1051	1050	1048	1050	1048	1050	1051	1052	1054	1053	1053	1053	1054	1054	1055	1060	1056	1054	1053
22	1049	1050	1050	1049	1044	1042	1043	1043	1044	1048	1048	1050	1051	1060	1063	1071	1073	1075	1079	1081	1078	1073	1066	1054	1058
23	1047	1046	1045	1045	1048	1048	1047	1047	1046	1044	1047	1051	1053	1054	1057	1057	1058	1057	1055	1055	1054	1055	1054	1054	1051
24 q	1051	1051	1050	1050	1050	1051	1051	1050	1048	1044	1047	1050	1049	1044	1043	1048	1049	1049	1049	1049	1050	1053	1054	1049	1049
25	1049	1049	1049	1049	1049	1048	1047	1045	1045	1045	1044	1046	1045	1044	1044	1047	1049	1050	1051	1057	1062	1060	1056	1055	1049
26 q	1055	1051	1049	1051	1050	1050	1049	1050	1053	1055	1052	1053	1053	1054	1051	1050	1050	1050	1051	1052	1054	1056	1055	1054	1052
27	1053	1050	1049	1049	1048	1048	1048	1048	1049	1050	1048	1049	1047	1046	1048	1050	1053	1054	1055	1055	1057	1060	1060	1060	1051
28	1056	1053	1048	1038	1038	1039	1042	1037	1044	1048	1048	1045	1045	1047	1053	1056	1059	1056	1053	1053	1057	1059	1055	1054	1049
29	1052	1050	1050	1049	1048	1047	1045	1045	1048	1046	1045	1045	1042	1044	1047	1050	1051	1050	1051	1059	1072	1073	1066	1061	1051
30	1056	1054	1053	1051	1048	1044	1043	1043	1043	1048	1047	1044	1044	1043	1045	1047	1050	1049	1051	1053	1054	1057	1059	1056	1049
31 q	1053	1050	1049	1048	1047	1045	1044	1043	1042	1043	1043	1041	1037	1042	1047	1048	1048	1045	1045	1045	1045	1044	1045	1045	1045
Mean	1055	1053	1053	1052	1051	1049	1049	*1049*	1050	1052	1053	1054	1053	1055	1059	1061	1062	1062	1063	1064	*1065*	1064	1061	1057	1056

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

105 ESKDALEMUIR — JANUARY 1942

	TERRESTRIAL MAGNETIC ELEMENTS												3-hr. range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination			Vertical force							
	Maximum 16,000γ +		Minimum 16,000γ +		Range	Maximum 12° +	Minimum 12° +	Range	Maximum 44,000γ +		Minimum 44,000γ +		Range			
	h. m.	γ	γ	h. m.	γ	h. m. ′	′	′	h. m.	γ	γ	h. m.	γ			°A
1 q	17 18	538	514	11 54	24	12 34 47·3	42·3	20 50	5·0	0 1	1063	1055	7 20	*8*	0,1,0,1,1,1,1,1	6	0	84·1
2	6 12	553	457	20 2	96	16 56 *58·7*	33·3	20 6	25·4	20 5	*1114*	1046	6 55	68	1,2,2,2,3,3,4,3	20	1	84·3
3 d	5 54	550	479	21 7	71	15 8 52·1	37·7	23 37	14·4	21 13	1097	1036	8 18	61	3,3,2,2,2,3,2,3	20	1	84·3
4 d	4 11	564	*440*	22 9	124	16 36 52·6	27·9	21 51	24·7	19 42	1110	1029	4 45	*81*	2,4,2,2,4,3,3,4	24	1	84·1
5 d	18 38	*584*	449	19 4	*135*	3 56 50·6	33·3	19 10	17·3	18 18	1104	1038	4 10	66	2,3,3,4,3,3,5,4	27	1	84·2
6	22 17	557	470	18 8	87	16 52 49·5	27·1	18 31	22·4	18 15	1084	1044	24 0	40	1,2,2,2,2,3,4,3	19	1	84·1
7	20 42	530	471	12 3	59	12 54 47·4	38·5	0 1	8·9	16 4	1073	1042	0 8	31	2,2,1,3,3,2,2,1	16	1	84·1
8	23 11	544	503	15 31	41	14 12 46·9	42·4	8 32	*4·5*	15 58	1065	1055	23 15	10	1,0,1,0,1,1,0,2	6	0	84·0
9	3 43) 19 50)	534	506	12 19	28	13 30 46·6	33·6	24 0	13·0	16 52	1064	1051	3 46	13	1,2,1,0,1,2,2,3	12	0	84·0
10	22 12	546	483	17 10	63	12 29 49·4	33·3	0 23	16·1	17 21	1075	1046	0 53	29	3,2,2,1,2.3,2,3	18	1	84·0
11	20 19	530	487	12 30	43	1 19 49·4	38·0	20 12	11·4	19 40	1069	1040	1 40	29	2,1,2,2,2,2,3,2	16	0	84·0
12	20 45	536	487	20 22	49	12 33 47·7	27·0	20 36	20·7	20 33	1075	1050	2 28	25	2,2,1,2,2,2,4,2	17	1	84·0
13	6 57	528	495	12 30	33	13 6 48·7	41·5	18 43	7·2	19 33	1065	1053	1 15	12	1,1,1,2,2,2,2,1	12	0	83·9
14	22 16	549	511	10 55	38	13 21 47·0	35·1	22 50	11·9	22 4	1063	1050	12 30	13	1,1,1,0,0,1,2,3	9	0	83·8
15	6 42	541	495	16 4	46	15 13 53·9	41·3	7 8	12·6	16 32	1069	1047	7 10	22	1,0,2,2,2,3,2,2	14	0	83·8
16	6 53	529	467	20 8	62	17 16 54·9	34·1	20 19	20·8	20 16	1107	1049	8 45	58	2,1,1,2,2,3,3,2	16	1	83·7
17 d	5 13	537	449	10 20	88	10 31 54·8	35·2	1 33	19·6	16 10	1074	1045	1 22	29	3,2,3,3,2,2,2,2	19	1	83·7
18 d	21 31	567	452	2 38	115	12 25 47·5	*19·8*	22 0	*27·7*	21 17	1069	1035	3 5	34	4,3,2,2,2,2,3,4	22	1	83·7
19	5 42	545	479	0 10	66	5 12 57·5	38·0	23 45	19·5	16 28	1061	*1003*	5 38	58	3,4,2,2,2,2,1,3	19	1	83·8
20	0 58	529	490	0 4	39	12 47 48·1	40·1	0 1	8·0	17 4	1059	1036	1 9	23	3,1,1,1,1,1,1,2	11	0	83·7
21 q	17 31	528	502	21 34	26	10 58 46·0	39·7	21 31	6·3	21 20	1061	1045	8 38	16	0,0,0,2,1,1,2,2	8	0	83·7
22	7 50	537	486	15 12	51	14 52 50·4	36·9	22 7	13·5	19 23	1083	1040	5 45	43	0,2,2,1,3,2,2,2	14	0	83·8
23	6 55	532	496	14 43	36	15 35 49·3	37·0	0 3	12·3	16 15	1060	1044	7 0	16	2,2,1,1,2,2,1,1	12	0	83·8
24 q	20 18	532	503	12 20	29	13 14 46·3	36·5	22 17	9·8	22 5	1055	1042	13 50	13	1,0,1,2,2,0,1,2	9	0	83·8
25	14 0	539	494	19 49	45	13 30) 13 34) 49·0	41·1	0 1	7·9	20 48	1062	1043	12 50	19	1,1,0,2,1,2,3,1	11	0	83·8
26 q	14 14	526	495	11 33	31	13 2 48·3	40·6	4 27	7·7	21 33	1057	1048	6 27	9	1,2,1,2,2,0,1,1	10	0	83·7
27	13 44	530	498	9 9	32	12 31 48·8	38·7	23 15	10·1	23 0	1061	1044	13 17	17	0,1,0,2,1,2,2,2	10	0	83·6
28	3 44	541	491	10 37	50	13 30 51·5	37·8	4 8	13·7	21 29	1060	1035	3 54	25	2,3,2,2,2,1,2,2	16	1	83·6
29	15 12	531	482	20 48	49	14 28 47·8	37·5	23 29	10·3	20 50	1078	1041	13 0	37	1,1,0,2,2,2,3,2	13	0	83·7
30	16 10	541	502	1 26	39	14 12 50·9	38·8	2 2	12·1	0 1	1060	1041	13 0	19	2,2,1,2,1,2,2,1	13	0	83·6
31 q	8 40	533	510	12 11	*23*	13 37 46·6	41·5	0 10	5·1	0 1	1055	1038	12 42	17	0,0,1,1,1,0,1,0	4	0	83·7
Mean	- -	541	485	- -	55	- - 49·9	36·3	- -	13·5	- -	1073	1042	- -	30	1·8	14·3	0·42	83·9

q denotes an international quiet day and d an international disturbed day.

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

106 ESKDALEMUIR (H) — 16,000γ (0·16 C.G.S. unit) + — FEBRUARY 1942

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	526	528	528	528	530	533	534	535	535	530	530	532	538	530	530	527	532	536	534	531	525	519	526	520	*530*
2	520	522	523	527	537	541	530	529	514	499	502	507	506	502	491	501	502	509	517	521	518	518	517	523	515
3	512	520	513	519	526	523	516	525	518	510	506	503	506	511	513	518	521	521	522	522	519	519	521	520	517
4	518	521	523	523	525	526	527	527	522	514	509	509	512	516	523	518	525	522	525	523	529	530	534	530	522
5 d	525	526	527	529	517	522	542	529	529	521	498	481	500	507	495	493	491	494	521	493	509	506	507	509	511
6 d	509	513	507	506	512	514	517	510	498	495	482	451	477	482	491	475	471	482	475	486	503	472	465	506	*492*
7	499	519	507	500	506	507	508	514	511	511	495	507	516	517	514	510	508	513	516	518	516	515	511	514	511
8 q	513	510	510	516	520	520	521	522	522	520	512	506	508	513	513	516	513	517	520	521	521	518	520	514	516
9 q	509	509	513	513	518	521	524	521	517	518	517	518	517	519	522	517	517	519	521	521	522	524	524	523	519
10	524	521	522	520	520	521	521	520	522	528	526	520	510	501	522	521	514	515	520	504	508	513	513	529	518
11	502	505	510	513	517	516	511	520	520	517	517	516	517	519	524	519	508	502	504	485	494	486	491	507	509
12 q	510	508	512	509	516	517	518	517	513	510	508	512	512	516	519	520	520	520	523	526	524	525	524	522	517
13	521	513	506	526	531	533	536	529	524	517	512	509	513	510	516	524	528	529	530	529	524	521	522	522	522
14	524	524	526	529	532	532	534	536	525	524	520	521	521	528	529	511	518	521	525	526	520	520	506	520	524
15	489	506	512	512	515	521	527	547	536	521	512	510	489	504	513	522	523	518	483	502	518	517	517	529	514
16	516	528	521	526	525	523	529	522	514	516	517	513	520	514	510	508	517	523	525	522	520	512	515	513	519
17	517	517	528	515	508	520	520	521	517	520	513	519	521	520	521	520	517	517	521	525	517	520	520	521	519
18 q	517	516	517	517	518	520	525	524	513	508	507	508	508	513	518	520	520	522	524	524	524	522	523	522	518
19 q	524	524	524	525	525	526	525	524	520	516	514	517	526	534	531	529	529	528	531	536	536	531	529	524	526
20	525	525	525	528	524	529	525	522	513	500	503	505	511	516	528	519	513	520	516	525	517	520	517	532	519
21	515	515	512	513	503	513	524	519	513	505	505	501	502	490	501	512	515	520	518	524	521	517	516	513	512
22	513	515	521	520	519	520	521	521	517	514	515	517	518	519	525	525	528	520	521	517	510	505	516	514	518
23 d	529	505	502	512	520	520	520	521	513	515	510	504	510	529	533	505	559	548	548	505	462	478	455	467	511
24 d	473	443	466	477	482	500	503	497	465	481	509	509	506	508	514	508	502	503	512	512	520	513	522	509	497
25	517	514	489	488	496	502	502	503	503	505	501	505	510	522	522	512	517	501	518	513	541	506	506	531	509
26	500	503	508	509	513	519	516	512	509	510	505	505	505	510	511	512	517	517	519	510	512	513	524	516	511
27	510	509	509	510	515	518	517	518	517	512	508	508	510	512	514	535	525	527	512	528	504	503	511	533	515
28 d	509	501	504	512	509	513	516	509	497	513	504	498	442	520	549	510	536	489	506	513	513	509	495	503	507
Mean	513	513	513	515	517	520	*522*	521	515	513	509	*507*	508	514	518	515	517	516	518	517	516	513	512	517	515

MAGNETIC DECLINATION (WEST)

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

107 ESKDALEMUIR (D) — 12° + — FEBRUARY 1942

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	43·4	43·5	43·7	44·0	44·3	43·7	43·6	43·3	43·0	42·2	43·1	44·6	45·5	46·9	46·6	46·1	46·1	45·8	44·7	44·3	44·1	43·5	42·9	42·2	44·3
2	42·9	43·8	44·8	43·2	43·0	43·0	44·2	45·6	44·9	46·3	46·7	44·5	47·3	48·7	48·7	45·7	41·9	44·9	43·9	42·9	42·5	42·9	43·0	41·3	44·4
3	42·3	43·4	44·8	44·9	43·2	42·5	43·2	42·6	42·6	43·0	43·3	44·7	45·9	46·6	46·0	45·4	44·3	43·2	43·1	43·4	43·0	42·2	42·3	43·1	43·7
4	43·2	43·9	44·0	43·5	43·2	43·1	42·4	42·2	41·6	41·9	43·5	44·8	46·8	47·4	47·7	46·3	45·8	45·2	45·0	44·9	44·9	43·7	43·4	43·1	44·2
5 d	41·1	42·2	43·2	42·3	41·7	45·3	43·5	45·8	47·6	46·3	45·7	49·3	52·0	52·0	51·0	47·6	46·6	41·9	26·5	44·7	44·4	43·1	43·3	42·2	*44·6*
6 d	42·4	41·2	29·0	37·5	37·6	41·1	41·3	43·0	43·1	45·6	46·6	48·6	50·7	49·4	48·8	42·2	34·9	43·5	39·7	36·6	30·6	30·8	35·3	45·7	41·1
7	45·0	46·0	44·8	41·3	42·7	42·9	43·5	42·9	42·2	42·5	44·7	43·2	43·7	44·6	42·7	41·5	42·1	43·0	43·1	43·0	42·8	42·3	41·7	42·2	43·1
8 q	42·6	42·4	43·3	43·8	43·1	42·4	42·3	42·4	43·0	43·5	44·1	45·2	45·9	45·9	44·7	43·5	43·4	43·7	44·0	43·9	43·5	42·8	42·2	39·6	43·4
9 q	41·9	42·6	42·5	42·5	42·5	42·4	42·3	42·4	42·2	43·9	45·7	47·3	46·9	46·4	45·2	44·0	43·7	43·4	43·4	43·3	43·1	43·1	43·1	43·0	43·6
10	43·1	43·1	43·0	42·8	42·9	43·0	42·2	42·5	43·3	44·1	45·8	46·1	47·0	47·4	47·5	45·7	45·0	39·9	45·2	45·1	43·3	43·3	43·1	40·4	43·9
11	40·4	41·0	40·1	41·5	41·1	40·7	42·5	42·4	43·2	44·4	45·6	46·8	48·6	48·5	47·0	45·9	47·1	46·6	46·5	45·9	41·4	37·5	39·6	41·9	43·6
12 q	43·6	43·0	43·8	44·3	43·1	42·0	41·8	41·7	42·1	43·1	43·7	45·0	45·3	45·4	45·0	43·8	43·5	44·0	43·6	43·5	43·2	43·1	43·2	43·2	43·5
13	43·0	42·6	47·7	45·2	42·3	42·4	42·2	41·6	41·5	42·4	44·0	45·1	46·9	46·2	46·2	44·5	43·4	43·3	43·3	43·4	43·3	43·1	43·1	43·2	43·7
14	44·0	43·9	43·7	43·4	43·3	43·1	42·7	42·4	42·2	43·4	45·8	47·3	46·3	46·2	46·3	45·7	44·0	43·7	43·2	42·6	42·4	40·1	37·1	37·0	43·3
15	35·2	38·9	41·4	40·8	39·7	41·1	44·8	41·3	42·7	42·1	44·2	47·4	48·5	47·9	46·2	44·8	43·6	43·3	41·3	40·6	42·4	42·2	41·8	41·3	42·6
16	40·6	44·3	43·2	41·6	42·1	42·5	41·8	42·3	42·7	44·8	46·8	45·8	45·4	45·5	45·8	43·5	43·3	43·9	43·6	43·8	43·1	40·6	35·3	42·5	43·1
17	42·4	42·5	42·4	35·7	37·3	39·0	41·3	42·3	43·0	44·9	45·1	46·6	47·0	46·7	45·1	43·2	42·3	43·1	43·3	43·3	42·8	41·7	42·7	43·2	42·8
18 q	43·1	43·1	45·6	42·7	42·3	41·7	40·4	40·4	42·3	43·3	44·9	46·2	46·2	45·7	44·4	43·5	43·0	43·4	43·5	43·3	43·1	42·6	42·5	42·4	43·3
19 q	42·4	42·9	43·1	43·2	43·2	43·1	42·6	42·4	42·4	42·7	44·3	46·2	46·9	47·3	45·1	43·9	43·5	44·1	44·9	44·5	44·1	43·2	41·6	41·3	43·7
20	42·1	42·4	42·4	41·7	42·2	41·3	41·4	40·6	40·6	42·0	44·2	47·8	49·6	48·1	49·4	47·7	46·3	43·2	45·1	43·9	43·7	42·5	42·3	41·5	43·8
21	37·2	40·3	38·2	35·5	32·9	36·1	40·3	40·1	41·3	42·4	43·2	44·3	45·9	48·9	48·8	45·8	44·1	43·3	42·5	43·4	43·3	42·6	40·6	40·7	41·7
22	42·8	41·6	39·7	40·1	38·0	39·4	39·5	40·3	41·2	42·1	44·0	45·8	47·9	47·0	47·6	46·7	46·7	47·2	49·5	47·6	45·3	42·2	41·6	41·4	43·5
23 d	35·2	35·9	38·6	39·0	38·2	38·0	39·5	40·7	41·5	43·1	43·6	44·2	46·1	51·5	56·9	59·4	62·2	48·4	48·7	50·6	35·1	35·1	27·0	38·4	43·2
24 d	39·6	50·6	39·0	35·9	38·5	39·5	40·5	41·5	44·5	46·6	44·8	47·6	47·6	46·8	46·2	45·1	44·3	42·5	44·8	44·2	43·4	43·1	39·8	41·2	43·2
25	44·3	44·9	38·5	37·2	38·5	38·6	39·8	40·7	40·7	41·4	42·1	43·1	44·2	44·7	44·8	44·2	44·0	42·7	43·9	44·4	31·1	40·4	39·6	29·6	*41·0*
26	39·7	41·8	41·6	41·3	41·3	41·3	41·6	42·3	41·6	41·5	42·2	43·6	45·0	46·0	45·8	44·7	43·8	43·4	43·3	43·4	43·6	42·4	39·1	39·3	42·5
27	39·8	40·8	41·3	41·2	39·6	38·7	39·8	40·5	40·5	41·2	43·0	45·5	47·4	47·6	46·8	47·1	47·2	49·3	47·7	47·0	41·8	38·1	38·6	35·8	42·8
28 d	37·9	37·9	39·8	39·9	33·4	35·2	37·7	38·6	39·8	41·9	44·8	46·5	50·3	55·8	54·2	49·6	53·3	43·0	41·3	40·4	41·2	42·3	40·4	42·7	42·8
Mean	41·5	42·5	41·9	41·3	40·8	41·2	41·7	42·0	42·4	43·3	44·5	45·8	47·1	*47·5*	47·2	45·6	45·0	44·0	43·5	43·9	42·0	41·5	*40·6*	41·1	43·2

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

108 ESKDALEMUIR (V) — 44,000γ (0·44 C.G.S. unit) + — FEBRUARY 1942

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	1045	1044	1045	1044	1044	1043	1042	1042	1039	1038	1045	1044	1038	1043	1046	1045	1044	1044	1044	1046	1048	1050	1049	1048	1044
2	1044	1044	1042	1042	1039	1038	1037	1036	1037	1042	1044	1048	1045	1050	1057	1067	1073	1066	1059	1055	1054	1053	1051	1050	1049
3	1049	1047	1048	1046	1045	1048	1047	1044	1044	1043	1044	1044	1045	1048	1053	1052	1051	1053	1053	1050	1049	1048	1048	1048	1048
4	1048	1048	1048	1048	1048	1048	1045	1044	1044	1048	1045	1047	1048	1050	1054	1054	1050	1050	1050	1049	1048	1048	1045	1047	1048
5 d	1049	1049	1049	1048	1048	1041	1030	1026	1027	1035	1039	1048	1050	1055	1066	1078	1083	1094	1096	1072	1062	1061	1057	1054	1055
6 d	1051	1048	1037	1030	1029	1038	1040	1043	1044	1042	1044	1056	1065	1065	1068	1085	1108	1096	1110	1114	1068	1049	1039	1025	1058
7	1023	1024	1020	1038	1048	1054	1054	1054	1055	1043	1044	1048	1049	1054	1057	1057	1056	1054	1055	1055	1055	1055	1054	1051	1048
8 q	1050	1051	1051	1050	1049	1049	1049	1046	1042	1044	1047	1048	1048	1049	1050	1053	1054	1050	1051	1051	1053	1053	1051	1050	1050
9 q	1050	1049	1050	1049	1049	1049	1048	1049	1048	1050	1049	1043	1044	1044	1048	1053	1053	1053	1051	1050	1051	1050	1049	1049	1049
10	1049	1049	1048	1048	1048	1047	1047	1044	1041	1037	1039	1043	1047	1050	1048	1049	1056	1065	1059	1065	1063	1062	1060	1054	1051
11	1054	1055	1055	1055	1053	1051	1049	1044	1043	1043	1043	1044	1047	1048	1050	1055	1059	1066	1074	1086	1081	1074	1068	1060	1057
12 q	1055	1055	1054	1054	1052	1051	1050	1050	1050	1053	1054	1055	1056	1055	1054	1051	1048	1048	1049	1049	1050	1049	1049	1049	1052
13	1049	1050	1048	1041	1044	1044	1043	1044	1044	1047	1047	1047	1045	1047	1048	1048	1045	1043	1044	1044	1047	1049	1049	1049	1046
14	1048	1048	1048	1046	1044	1044	1043	1042	1043	1043	1043	1043	1048	1049	1051	1056	1053	1048	1048	1048	1049	1053	1055	1044	1047
15	1034	1033	1038	1044	1045	1043	1036	1028	1029	1030	1030	1032	1039	1044	1048	1048	1048	1050	1072	1072	1059	1054	1051	1048	1044
16	1047	1032	1038	1041	1042	1041	1037	1037	1036	1036	1032	1037	1042	1048	1054	1059	1054	1047	1045	1044	1045	1051	1055	1049	1044
17	1048	1048	1036	1031	1031	1035	1037	1037	1037	1037	1038	1041	1045	1049	1050	1051	1050	1049	1048	1048	1049	1050	1049	1048	*1043*
18 q	1048	1049	1047	1047	1048	1044	1043	1041	1041	1042	1042	1044	1047	1048	1050	1051	1049	1048	1048	1048	1047	1048	1048	1048	1047
19 q	1048	1048	1048	1048	1047	1047	1045	1044	1047	1047	1044	1042	1044	1049	1051	1051	1050	1048	1047	1044	1043	1047	1048	1049	1047
20	1048	1048	1048	1048	1047	1045	1047	1048	1050	1048	1044	1041	1042	1043	1050	1057	1059	1061	1060	1059	1060	1060	1059	1053	1051
21	1044	1044	1048	1044	1044	1044	1042	1042	1038	1044	1048	1046	1043	1045	1043	1048	1051	1054	1054	1054	1052	1054	1054	1051	1047
22	1044	1033	1036	1041	1042	1041	1040	1039	1040	1038	1036	1035	1037	1042	1043	1049	1054	1055	1059	1067	1075	1081	1069	1062	1048
23 d	1059	1045	1048	1048	1039	1042	1043	1041	1042	1039	1041	1043	1042	1045	1064	1112	1207	1208	1208	1204	1162	1099	1044	1049	*1082*
24 d	1061	999	999	1032	1049	1053	1054	1054	1054	1056	1051	1047	1050	1054	1057	1064	1067	1072	1065	1066	1062	1067	1069	1057	1052
25	1037	1020	1027	1037	1045	1048	1049	1049	1050	1050	1050	1047	1050	1050	1054	1059	1062	1065	1061	1063	1068	1054	1057	1051	1050
26	1038	1045	1049	1050	1048	1047	1048	1050	1054	1055	1054	1050	1050	1050	1051	1053	1054	1054	1055	1060	1061	1061	1054	1045	1051
27	1048	1050	1054	1053	1049	1049	1049	1048	1047	1044	1039	1038	1040	1045	1049	1053	1056	1060	1074	1078	1074	1095	1090	1067	1056
28 d	1040	1051	1056	1048	1048	1050	1049	1049	1050	1044	1037	1039	1032	1043	1082	1120	1155	1147	1096	1080	1070	1064	1063	1059	1065
Mean	1047	*1043*	1043	1045	1045	1045	1044	1043	1043	1043	1043	1044	1046	1049	1053	1060	*1066*	1066	1065	1065	1061	1059	1055	1051	1051

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

109 ESKDALEMUIR — FEBRUARY 1942

	TERRESTRIAL MAGNETIC ELEMENTS												3-hr. range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination			Vertical force							
	Maximum 16,000γ +		Minimum 16,000γ +		Range	Maximum 12° +	Minimum 12° +	Range	Maximum 44,000γ +		Minimum 44,000γ +		Range			
	h. m.	γ	γ	h. m.	γ	h. m. ′	′ h. m.	′	h. m.	γ	γ h. m.		γ			°A.
1	12 50	553	513	23 28	40	12 52 49·4	41·3 23 25	8·1	21 52	1051	1035 12 52		16	1,1,1,1,2,1,1,1	9	0	83·7
2	5 11	548	468	14 38	80	12 39 53·5	37·7 16 10	15·8	16 20	1075	1032 7 47		43	2,2,?,3,4,3,1,2	20	1	83·8
3	7 40	533	502	2 3	31	3 5 47·7	40·9 18 4	6·8	18 26	1054	1042 7 40		12	2,2,2,1,1,1,1,1	11	0	83·7
4	22 54	541	502	10 58	39	13 3 48·6	41·2 8 46	7·4	15 15	1056	1043 7 25		13	0,0,1,0,1,0,1,2	5	0	83·6
5 d	18 32	565	469	18 6	96	12 37 62·6	14·0 18 25	48·6	18 26	1111	1026 7 24		85	1,3,2,3,3,3,5,2	22	1	83·6
6 d	19 58	553	432	11 50	121	12 34 53·3	20·8 19 51	32·5	19 22	1122	1015 23 43		107	4,3,2,4,3,4,5,4	29	1	83·6
7	1 47	540	490	10 49	50	1 58 53·0	39·7 3 17	13·3	14 50	1060	1013 2 10		47	3,2,1,2,2,1,1,2	14	1	83·4
8 q	22 41	528	503	11 56	*25*	12 48 46·0	38·7 23 18	7·3	16 0	1055	1044 9 5		*11*	1,1,1,1,1,1,0,2	8	0	83·3
9 q	22 3	532	505	0 1	27	12 10 48·1	40·4 0 1	7·7	15 54	1059	1040 13 30		19	2,1,0,0,2,0,0,1	6	0	83·2
10	23 23	540	485	13 1	55	13 37 48·7	36·1 17 12	12·6	17 19	1068	1036 9 40		32	0,0,1,2,3,3,3,3	15	1	83·2
11	14 10	528	470	19 41	58	12 42 49·9	34·3 21 20	15·6	19 46	1090	1042 8 40		48	2,1,2,1,1,2,3,3	15	1	83·1
12 q	19 44	532	505	3 13) 10 47)	27	13 40 45·8	41·5 7 29	*4·3*	0 1	1058	1047 17 33		*11*	1,1,1,2,0,0,1,0	6	0	83·0
13	6 59	540	497	2 26	43	2 46 50·1	41·3 7 23	8·8	2 23	1053	1042 17 10		*11*	3,2,1,1,2,1,1,1	12	0	83·1
14	14 18	540	489	24 0	51	11 23 48·5	32·9 23 38	15·6	15 43	1059	1039 24 0		20	0,0,1,2,2,1,1,3	10	0	83·0
15	23 40	559	468	18 40	91	11 52) 12 9)	34·1 0 34	15·4	19 0	1085	1026 8 6		59	3,2,3,2,3,2,3,3	21	1	83·0
16	1 5	558	497	15 2	61	1 9 48·6	28·6 22 5	20·0	22 2	1060	1030 1 20		30	3,1,2,2,3,2,2,4	19	1	82·9
17	3 1	540	505	4 20	35	12 12 47·4	34·7 3 20	12·7	15 49	1053	1030 3 11		23	3,3,2,1,1,1,1,1	13	0	83·0
18 q	6 51	532	505	10 19	27	2 32 47·6	39·7 7 1	7·9	15 36	1053	1038 7 42		15	2,2,1,1,1,1,0,0	8	0	83·0
19 q	19 30	544	513	10 30	31	13 19 48·9	40·3 22 56	8·6	14 52	1053	1042 11 30		*11*	0,0,0,1,2,1,2,1	7	0	83·0
20	23 47	559	496	9 44	63	12 22 50·3	39·8 5 50	10·5	17 24	1066	1039 11 20		27	1,2,1,2,2,2,2,3	15	0	83·0
21	0 1	536	462	13 47	74	13 46 54·8	31·6 3 59	23·2	18 30	1056	1038 8 35		18	2,3,2,1,3,1,1,1	14	1	83·0
22	16 58	532	499	20 57	33	18 32 50·5	37·5 4 26	13·0	21 21	1084	1032 1 26		52	2,2,2,2,1,2,2,2	15	0	83·0
23 d	17 2	*661*	*383*	22 41	*278*	16 53 *67·2*	*2·8* 20 51	*64·4*	16 56	*1330*	1017 22 31		*313*	4.2.2.1.4.6.6.5	30	2	83·1
24 d	22 52	556	408	1 50	148	1 30 59·5	32·2 22 49	27·3	17 31	1074	*964* 1 40		110	5,3,3,3,3,2,2,3	24	1	83·0
25	20 33	593	477	2 43	116	0 9 47·8	20·9 23 33	26·9	20 18	1079	1018 1 51		61	3,2,1,2,3,3,5,4	23	1	83·0
26	22 49	531	483	0 8	48	13 23 46·6	36·0 22 47	10·6	20 20	1062	1037 0 5		25	2,1,1,1,1,1,2,2	11	0	83·0
27	19 40	568	478	20 47	90	19 48 51·0	32·5 23 29	18·5	21 32	1098	1036 11 0		62	1,1,1,1,1,3,4,3	15	1	83·0
28 d	16 18	576	384	12 7	192	14 16 58·2	32·3 4 25	25·9	16 58	1180	1025 12 38		155	3,3,2,3,6,5,2,2	26	2	83·0
Mean	- -	551	478	- -	73	- - 51·2	33·7 - -	17·5	- -	1082	1031 - -		51	1·9	15·1	0·57	83·2

q denotes an international quiet day and d an international disturbed day.

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

110 ESKDALEMUIR (H) — 16,000γ (0·16 C.G.S. unit) + — MARCH 1942

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1 d	502	497	499	502	504	505	505	396	283	501	579	493	571	567	579	531	522	520	533	486	521	540	524	422	503
2 d	372	363	446	450	447	466	470	475	458	470	485	485	486	524	531	520	551	514	526	512	494	504	509	509	*482*
3 d	497	504	486	475	481	494	489	438	420	415	438	477	481	489	512	520	536	532	478	494	501	493	505	487	485
4	489	490	475	477	486	491	489	476	484	463	476	478	490	494	505	506	510	509	512	512	536	520	512	517	496
5 d	502	501	505	506	517	492	516	513	502	490	490	494	482	497	509	536	528	506	517	481	466	450	485	486	499
6	482	478	475	466	501	482	494	490	490	459	462	481	494	490	489	513	510	508	509	512	512	514	524	517	494
7	517	510	513	516	517	520	524	521	517	513	504	481	490	501	503	513	515	525	532	536	536	526	521	524	516
8 d	519	508	454	496	489	497	489	505	501	501	494	496	498	505	505	497	521	505	533	516	544	495	481	489	502
9	489	508	450	419	466	485	485	484	508	508	496	486	500	505	517	525	512	485	503	500	494	498	536	493	494
10	497	505	502	502	508	499	509	514	512	506	502	496	507	520	521	517	529	502	516	540	531	532	524	524	513
11	517	522	505	518	492	517	536	529	516	509	501	495	501	509	513	513	513	514	517	518	520	520	526	529	515
12 q	522	521	517	518	522	527	532	530	524	515	512	511	513	513	518	526	528	526	528	528	528	529	524	532	*523*
13	540	533	506	508	527	520	524	524	517	481	482	478	486	466	501	508	510	512	498	509	517	532	555	512	510
14	516	521	526	509	514	526	520	473	489	509	501	478	464	485	495	490	512	516	517	520	520	518	521	529	507
15	510	513	517	519	522	519	517	514	509	501	494	500	512	497	506	524	525	521	501	520	522	521	521	522	514
16 q	528	521	520	520	521	525	526	521	517	505	497	494	502	505	510	513	521	520	522	524	520	524	520	517	516
17	517	518	519	512	524	533	526	513	512	505	497	501	508	510	513	517	525	525	527	526	540	517	517	521	518
18	517	517	517	517	520	520	524	525	524	513	513	508	513	513	509	528	492	500	508	529	522	516	548	532	518
19	514	516	517	521	517	518	514	518	513	517	506	513	520	513	529	533	537	494	516	494	494	497	512	478	513
20	458	494	476	512	518	505	516	498	487	488	485	489	499	504	514	517	514	516	517	520	521	525	524	525	505
21	529	528	527	539	536	538	510	489	480	481	494	494	501	498	508	509	508	535	508	517	524	506	505	515	512
22	493	489	482	512	499	508	501	493	496	489	470	470	479	490	508	520	517	521	532	532	528	520	514	520	503
23	517	508	509	512	516	521	520	516	507	498	491	489	494	508	519	526	514	519	515	527	551	524	517	515	514
24	514	510	513	512	516	524	522	520	513	497	489	489	491	487	502	500	514	525	532	531	529	528	525	523	513
25 q	524	524	517	520	524	525	530	529	521	506	497	494	494	494	506	518	508	522	528	530	529	529	527	526	518
26	528	527	528	529	529	531	536	546	531	489	459	478	524	506	473	501	517	524	532	536	528	526	524	528	518
27 q	521	525	525	532	530	518	517	513	505	490	479	478	485	497	505	515	520	521	524	528	526	524	517	519	513
28 q	521	524	521	523	520	521	521	518	515	499	490	489	491	491	508	517	524	526	529	536	536	536	534	532	518
29	533	540	540	538	529	546	540	534	536	512	497	493	490	506	489	497	515	529	528	529	525	524	529	533	522
30	526	528	529	520	521	529	534	535	529	506	495	490	490	506	493	497	524	520	516	513	515	519	519	521	516
31	520	518	518	521	526	525	525	528	525	504	497	483	480	490	505	519	525	529	536	535	529	516	521	532	517
Mean	507	508	504	507	511	514	515	506	498	495	493	*490*	498	503	509	515	519	517	519	519	*521*	517	520	514	509

MAGNETIC DECLINATION (WEST)

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

111 ESKDALEMUIR (D) — 12° + — MARCH 1942

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1 d	44·9	45·1	42·5	42·0	40·9	40·6	40·1	68·4	64·8	14·4	38·4	23·9	38·7	43·8	51·1	45·9	48·7	50·6	44·1	27·2	37·8	46·8	42·4	50·5	43·1
2 d	49·7	27·0	27·9	37·5	41·1	44·5	43·4	40·0	38·5	38·1	40·2	40·2	39·4	39·6	40·7	39·6	37·9	39·4	38·1	40·4	43·0	43·4	44·7	45·5	*40·0*
3 d	45·7	48·6	51·3	48·6	50·9	44·0	45·9	49·8	53·4	42·3	41·3	46·6	44·8	43·5	38·4	34·9	34·5	33·2	41·5	42·5	41·8	41·6	42·3	39·5	43·6
4	42·9	41·2	40·4	40·8	41·2	39·6	40·6	42·5	45·2	44·8	44·9	47·0	47·0	47·9	47·0	46·8	45·8	35·7	41·2	43·5	40·1	39·8	39·7	39·7	42·7
5 d	40·6	41·5	41·4	41·4	42·9	49·4	50·6	49·1	46·9	44·4	46·6	47·8	49·0	48·6	47·7	48·1	47·5	35·3	38·7	44·6	38·8	33·3	30·8	40·8	43·6
6	42·3	46·4	43·3	46·8	48·4	41·5	43·8	46·0	45·9	44·9	46·3	45·9	47·7	48·4	47·0	40·8	42·6	41·6	42·5	42·2	42·2	41·7	41·6	40·5	44·2
7	40·5	39·9	40·1	37·9	38·0	38·0	39·7	42·3	43·2	43·5	44·0	45·0	45·2	46·8	49·4	45·5	40·5	39·7	41·3	41·6	44·2	44·1	40·9	40·1	42·1
8 d	39·0	31·5	37·9	43·0	37·1	37·3	41·5	42·4	41·4	39·7	41·2	43·0	44·9	46·1	46·9	46·7	45·1	43·3	40·5	43·8	36·2	36·0	38·9	38·7	40·9
9	40·7	39·7	27·1	30·5	28·6	38·8	39·6	38·9	39·6	41·6	44·2	45·7	47·3	48·5	47·7	47·9	46·9	41·1	40·5	38·1	39·5	38·5	38·7	34·6	40·2
10	39·3	41·2	40·6	39·5	38·6	40·0	40·8	40·6	40·5	41·4	43·4	47·1	46·9	48·5	48·5	47·8	47·2	45·2	43·8	44·8	44·5	43·3	42·3	41·1	43·2
11	39·6	45·7	38·6	36·8	36·6	43·1	39·6	40·5	40·4	41·6	42·4	44·6	45·8	45·9	45·9	44·3	43·1	42·3	41·7	41·5	42·2	42·2	42·1	43·3	42·1
12 q	41·7	43·1	41·8	40·4	40·4	40·4	40·6	40·8	40·5	41·3	43·1	45·2	46·7	47·0	46·3	45·3	44·2	43·4	43·1	43·2	43·1	43·2	42·5	38·4	42·7
13	35·7	36·0	34·4	39·8	41·3	37·8	38·9	39·7	39·6	44·1	46·2	50·3	52·1	55·0	51·4	51·5	48·6	45·1	44·8	42·7	42·7	37·9	34·3	40·4	42·9
14	41·2	43·2	42·2	39·6	41·3	40·8	41·5	49·6	58·5	47·5	44·4	47·8	47·6	46·3	48·8	44·2	43·0	42·4	40·9	40·7	41·3	40·8	41·4	45·0	44·2
15	37·0	41·6	40·5	40·5	40·4	40·4	39·9	40·5	39·7	40·6	43·1	45·9	49·2	49·7	45·3	45·6	43·7	42·3	40·1	42·5	42·5	42·3	40·7	41·5	42·3
16 q	43·7	41·7	41·3	41·4	41·4	41·4	41·3	41·7	41·2	39·8	42·3	45·1	47·0	46·9	45·9	44·0	43·1	42·3	42·5	39·1	39·7	41·0	41·5	42·2	42·4
17	42·2	45·9	43·0	40·5	41·6	40·1	40·7	41·3	40·6	41·4	43·4	46·3	47·1	46·7	44·4	43·3	42·6	43·0	42·6	43·3	43·3	39·9	40·5	41·5	42·7
18	40·9	41·6	41·3	41·3	40·9	40·5	40·5	40·5	41·4	45·7	46·4	47·0	47·7	50·4	49·5	50·3	50·4	46·8	43·5	40·7	38·2	36·7	38·5	40·0	43·4
19	39·0	40·3	39·4	39·0	38·6	39·2	40·9	39·4	38·2	39·8	41·5	46·0	49·6	49·6	50·4	50·6	51·6	51·2	46·8	40·6	40·3	40·5	39·6	27·9	42·5
20	31·3	35·4	36·9	38·4	33·2	37·8	39·3	39·1	38·9	40·5	42·5	45·6	46·9	48·0	47·5	46·0	43·9	43·2	41·4	41·5	41·2	42·2	42·2	42·2	41·0
21	41·9	40·9	43·8	41·3	36·6	39·6	42·4	44·1	48·2	46·1	47·1	50·2	52·0	50·9	48·4	46·8	44·4	33·6	42·9	39·6	39·4	37·6	36·9	34·7	42·9
22	35·3	41·6	43·2	40·5	37·8	43·0	39·0	39·3	37·9	39·1	43·0	44·9	48·4	49·4	48·8	48·0	46·1	43·7	36·9	38·7	41·3	41·1	40·0	42·3	42·1
23	41·1	39·6	42·2	42·4	41·4	40·5	40·4	39·2	38·7	40·3	42·2	46·0	48·7	49·0	48·5	48·9	46·5	46·1	46·0	45·4	35·8	39·7	37·4	39·8	42·7
24	40·0	39·8	39·8	38·9	42·3	40·4	39·8	38·8	37·6	38·8	41·2	44·2	46·7	47·0	48·5	45·3	43·4	43·1	42·3	42·3	42·5	43·0	42·1	40·9	42·0
25 q	43·1	40·6	39·9	40·3	39·9	40·5	40·6	39·1	38·0	38·6	41·3	45·7	47·9	48·0	47·8	46·2	43·2	42·1	41·7	41·6	41·8	42·2	42·2	42·3	42·3
26	42·2	42·1	41·4	40·7	40·7	40·9	40·2	39·0	35·7	35·6	43·0	46·1	52·9	55·1	54·9	53·1	52·4	47·6	46·2	45·6	44·2	43·2	42·3	42·2	*44·5*
27 q	40·9	41·2	41·5	46·8	41·3	39·9	38·9	37·7	36·2	37·7	41·0	44·1	47·6	49·8	48·0	45·8	43·3	43·1	43·0	41·5	38·1	38·0	39·9	43·0	42·0
28 q	43·1	43·0	40·6	40·6	41·1	41·2	40·6	39·3	38·1	37·3	38·9	42·2	46·8	47·0	47·5	45·9	44·8	44·0	43·2	43·1	43·2	42·9	42·5	42·2	42·5
29	42·2	41·6	40·7	41·4	44·0	39·6	38·8	39·9	38·7	39·6	41·3	44·3	48·5	50·8	52·4	48·0	44·9	43·3	42·6	42·6	39·3	39·9	41·3	40·9	42·8
30	40·5	41·7	41·6	41·6	40·7	40·9	41·2	39·9	38·0	38·1	39·5	42·3	46·0	50·4	49·2	47·5	47·4	39·7	39·8	40·1	42·1	40·2	39·3	42·0	42·1
31	42·1	41·7	41·2	41·3	41·7	42·2	39·7	38·7	38·3	38·7	40·4	43·2	48·5	49·7	48·5	45·2	43·3	42·3	41·7	41·3	37·8	39·9	41·8	42·3	42·1
Mean	41·0	41·0	40·3	40·7	40·3	40·8	41·0	42·2	42·1	*40·2*	42·7	44·8	47·3	*48·2*	47·8	46·1	44·9	42·4	42·1	41·5	40·9	40·7	40·4	40·8	42·5

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

112 ESKDALEMUIR (V) — 44,000γ (0·44 C.G.S. unit) + — MARCH 1942

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1 d	1045	1048	1053	1054	1055	1056	1056	1056	1065	1148	1102	1102	1107	1120	1123	1118	1099	1090	1119	1122	1101	1108	1071	1007	*1084*
2 d	873	829	875	940	1011	1029	1042	1060	1066	1068	1068	1067	1072	1083	1093	1098	1098	1096	1085	1077	1069	1066	1062	1061	1037
3 d	1060	1048	1024	1026	1026	1033	1051	1057	1054	1074	1090	1086	1095	1114	1126	1157	1185	1146	1101	1083	1075	1069	1056	1055	1079
4	1061	1048	1041	1046	1039	1050	1055	1056	1054	1058	1055	1054	1060	1065	1075	1076	1078	1090	1080	1072	1067	1051	1054	1049	1060
5 d	1048	1054	1059	1060	1056	1043	1019	1021	1030	1042	1044	1047	1054	1059	1063	1065	1080	1175	1235	1178	1048	1066	1062	1056	1069
6	1063	1038	1005	985	982	1017	1033	1040	1047	1060	1062	1071	1074	1074	1081	1089	1082	1074	1066	1062	1062	1062	1060	1061	1052
7	1060	1059	1059	1057	1056	1055	1052	1049	1049	1047	1044	1048	1048	1050	1054	1066	1077	1075	1066	1060	1059	1067	1066	1060	1058
8 d	1054	1022	995	946	1018	1036	1034	1031	1034	1042	1045	1048	1053	1059	1066	1078	1090	1108	1115	1089	1071	1059	1053	1038	1049
9	1023	913	927	904	957	1024	1045	1052	1054	1050	1047	1045	1047	1051	1059	1072	1081	1104	1097	1097	1090	1075	1025	1018	*1036*
10	1041	1048	1048	1049	1048	1051	1054	1054	1055	1055	1054	1052	1051	1050	1053	1065	1071	1078	1071	1061	1060	1060	1060	1059	1056
11	1059	1029	1030	1030	1040	1029	1025	1034	1042	1044	1042	1044	1048	1051	1054	1060	1061	1060	1060	1059	1059	1055	1054	1051	1047
12 q	1050	1049	1048	1050	1049	1048	1045	1048	1048	1050	1048	1045	1047	1045	1048	1049	1053	1054	1054	1054	1054	1055	1056	1054	1050
13	1036	1008	1025	1017	994	1020	1032	1039	1042	1048	1042	1044	1053	1067	1081	1074	1072	1073	1084	1080	1074	1067	1033	1045	1048
14	1052	1044	1036	1044	1045	1044	1044	1044	1032	1036	1041	1046	1059	1060	1066	1078	1077	1069	1066	1062	1060	1060	1051	1023	1052
15	1033	1045	1051	1054	1053	1052	1051	1053	1051	1049	1047	1042	1042	1059	1066	1060	1057	1062	1072	1061	1057	1058	1059	1056	1054
16 q	1052	1053	1054	1054	1053	1050	1050	1054	1054	1049	1045	1042	1042	1048	1054	1057	1057	1057	1056	1059	1059	1055	1055	1055	1053
17	1055	1050	1041	1049	1049	1049	1047	1049	1050	1049	1044	1042	1043	1050	1056	1060	1060	1059	1057	1057	1051	1045	1051	1053	1051
18	1055	1055	1055	1054	1054	1053	1052	1051	1046	1039	1034	1033	1036	1045	1056	1066	1088	1098	1095	1080	1072	1066	1047	1039	1057
19	1048	1051	1054	1054	1054	1050	1047	1049	1049	1043	1036	1029	1032	1039	1051	1065	1089	1110	1104	1107	1092	1071	1051	1041	1059
20	1001	999	1006	999	1018	1030	1038	1047	1051	1051	1048	1046	1039	1041	1051	1060	1060	1062	1062	1061	1060	1058	1056	1055	1042
21	1054	1054	1048	1026	1024	1028	1032	1035	1035	1033	1038	1041	1045	1054	1060	1069	1084	1108	1097	1090	1065	1049	1055	1054	1053
22	1048	1019	1012	1030	1029	1026	1038	1050	1054	1054	1049	1047	1041	1045	1057	1064	1068	1068	1061	1056	1060	1060	1052	1048	
23	1044	1048	1047	1043	1044	1048	1053	1054	1053	1047	1045	1041	1037	1039	1051	1063	1079	1077	1078	1073	1065	1048	1055	1050	1053
24	1050	1052	1054	1054	1047	1035	1036	1043	1045	1044	1041	1036	1035	1039	1050	1060	1062	1060	1059	1056	1055	1054	1054	1054	1049
25 q	1051	1048	1050	1052	1053	1053	1053	1054	1054	1049	1045	1037	1034	1038	1045	1055	1059	1057	1054	1054	1054	1054	1054	1052	1050
26	1051	1051	1050	1049	1048	1049	1050	1048	1045	1042	1040	1036	1036	1051	1059	1057	1066	1076	1069	1063	1061	1060	1059	1056	1053
27 q	1055	1054	1053	1041	1033	1038	1048	1054	1055	1051	1045	1039	1036	1039	1048	1056	1057	1057	1057	1060	1060	1059	1055	1053	1050
28 q	1050	1049	1051	1051	1051	1049	1050	1052	1053	1053	1047	1041	1041	1045	1050	1052	1051	1051	1053	1051	1051	1051	1052	1052	1050
29	1051	1049	1048	1047	1044	1033	1038	1041	1041	1043	1038	1031	1033	1047	1066	1072	1068	1061	1056	1056	1058	1059	1055	1053	1049
30	1054	1053	1050	1050	1049	1049	1048	1048	1049	1049	1045	1039	1033	1033	1051	1057	1068	1090	1091	1081	1070	1061	1059	1055	1055
31	1055	1055	1055	1055	1053	1049	1050	1050	1049	1051	1050	1043	1031	1038	1048	1054	1059	1059	1054	1056	1059	1060	1057	1054	1052
Mean	1043	1033	1032	*1031*	1037	1041	1044	1047	1049	1052	1049	1047	1049	1055	1063	1070	1075	*1081*	1080	1074	1064	1061	1055	1049	1053

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

113 ESKDALEMUIR — MARCH 1942

	TERRESTRIAL MAGNETIC ELEMENTS												3-hr. range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination			Vertical force							
	Maximum 16,000γ +		Minimum 16,000γ +		Range	Maximum 12° +	Minimum 12° +	Range	Maximum 44,000γ +		Minimum 44,000γ +		Range			
	h. m.	γ	γ	h. m.	γ	h. m. ′	′	′	h. m.	′	h. m.	γ	γ			°A.
1 d	10 0	*751*	*95*	8 15	*656*	7 46 *107·2*	*−16·3*	*123·5*	9 27	1179	934	24 0	245	2,2,7,8,7,5,5,6	42	2	83·0
2 d	16 37	584	282	1 43	302	0 28 60·3	14·8	45·5	16 47	1102	*787*	1 53	*315*	6,5,3,3,4,4,3,2	30	2	83·0
3 d	17 7	614	388	9 40	226	8 2 56·7	19·7	37·0	16 32	1206	1017	2 49	189	3,3,4,4,4,5,3,4	30	2	83·0
4	20 41	563	455	9 9	108	13 55 49·3	31·1	18·2	17 37	1097	1033	2 13	64	3,2,3,3,2,4,4,3	24	1	83·0
5 d	15 23	594	393	20 9	201	19 48 64·0	18·0	46·0	18 19	*1276*	1014	6 32	262	1,3,3,2,3,5,6,4	27	2	83·0
6	22 51	533	423	3 55	110	4 31 52·3	38·9	13·4	15 24	1091	976	4 39	115	4,4,3,3,3,3,1,2	23	1	83·0
7	20 35	565	458	11 21	107	14 52 50·1	36·8	13·3	17 1	1080	1044	10 30	36	2,1,2,4,3,3,3,3	21	1	83·0
8 d	20 8	599	381	2 48	218	2 58 53·5	21·7	31·8	18 22	1121	918	3 11	203	5,5,3,2,3,3,5,4	30	2	82·9
9	1 20	572	392	1 0	180	13 6 49·5	17·9	31·6	17 35	1106	891	3 29	215	6,5,3,3,3,4,3,5	32	2	83·0
10	16 52) 19 21)	544	474	11 35	70	14 10 49·5	34·4	0 1 15·1	17 9	1079	1031	0 1	48	2,2,2,3,2,4,4,1	20	1	83·0
11	23 20	548	481	4 50	67	1 3 50·0	33·3	3 49) 4 3) 16·7	16 23	1062	1018	1 55	44	3,3,2,2,1,2,1,3	17	1	83·0
12 q	24 0	546	508	12 0	*38*	13 17 47·7	36·0	23 56 11·7	23 3	1057	1044	13 18	*13*	2,1,2,2,2,2,1,3	15	0	83·0
13	22 23	613	450	13 30	163	13 20 57·8	27·9	21 51 29·9	18 14	1087	1018	4 26	69	3,3,2,3,4,3,3,5	26	1	82·9
14	23 10	569	435	8 2	134	8 26 61·2	38·9	3 11 22·3	15 47	1084	1016	23 28	68	2,2,4,4,3,4,2,4	25	1	82·9
15	17 6	533	478	13 34	55	13 18 51·3	35·5	0 26 15·8	18 17	1075	1024	0 1	51	3,2,1,3,3,3,3,1	19	1	82·8
16 q	0 18	533	493	11 3	40	12 57 47·4	37·7	19 32 *9·7*	19 38	1061	1039	12 2	22	2,1,1,1,2,2,2,1	12	0	82·8
17	20 30	566	495	11 9	71	1 53 50·2	38·6	21 31 11·6	17 12	1060	1037	21 5	23	3,3,3,1,2,2,3,2	19	0	82·7
18	22 56	567	474	16 31	93	16 23 53·1	29·4	21 3 23·7	17 48	1102	1031	10 48	71	1,0,2,3,3,4,3,4	21	1	82·7
19	16 47	547	449	19 56	98	16 18 54·0	21·9	23 56 32·1	19 21	1115	1026	11 42	89	2,2,2,3,3,4,4,4	24	1	82·7
20	18 57	529	419	0 13	110	13 47 48·5	22·6	0 1 25·9	17 43	1064	978	0 58	86	4,3,3,2,1,2,2,0	17	1	82·7
21	19 49	551	467	7 58	84	13 12 52·3	27·5	17 10 24·8	17 20	1112	1019	3 56	93	3,3,3,3,3,4,4,3	26	1	82·8
22	23 58	552	458	10 29	94	13 42 50·4	33·3	18 46 17·1	18 34	1071	1003	1 43	68	3,3,2,3,3,2,3,3	22	1	82·8
23	20 32	579	478	11 19	101	13 43 52·0	30·7	20 31 21·3	16 26	1083	1030	12 10	53	3,2,1,2,3,3,4,4	22	1	82·8
24	18 41	536	470	11 40	66	14 11 50·9	36·7	8 39 14·2	15 54	1065	1033	5 50	32	1,2,1,3,3,3,1,1	15	1	82·8
25 q	6 47	536	482	13 12	54	12 59 51·8	37·1	8 12 14·7	16 10	1061	1033	11 59	28	2,1,1,2,3,2,1,1	13	0	82·8
26	16 17	583	413	16 48	170	14 53 58·4	32·7	8 50 25·7	17 12	1079	1033	12 18	46	1,1,3,3,5,5,3,2	23	1	82·7
27 q	3 39	547	470	11 26	77	13 30 51·2	34·4	20 57 16·8	20 52	1062	1030	4 29	32	2,3,1,2,2,2,3,3	18	1	82·7
28 q	19 44	540	481	12 59	59	14 22 47·6	37·0	9 18 10·6	18 30	1054	1038	12 6	16	1,1,1,2,2,1,2,1	11	0	82·7
29	5 28	552	470	14 42	82	14 31 54·1	36·9	8 11) 20 51) 17 2	15 5	1072	1028	5 28	44	2,3,2,2,4,3,2,2	20	1	82·7
30	17 49	556	470	15 3	86	13 49 52·6	33·2	17 32 19·4	17 42	1097	1030	13 10	67	2,2,2,2,3,4,3,2	20	1	82·6
31	23 40	559	470	12 10	89	12 58 52·1	32·3	20 41 19·8	21 11	1062	1029	12 39	33	1,2,2,3,2,2,3,3	18	1	82·6
Mean	— —	566	437	— —	129	— — 54·4	29·4	— — 25·0	— —	1094	1006	— —	88	2·8	22·0	1·03	82·8

q denotes an international quiet day and d an international disturbed day.

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

114 ESKDALEMUIR (H) — 16,000γ (0·16 C.G.S. unit) + — APRIL 1942

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	532	536	534	533	527	547	553	548	533	517	508	508	512	521	505	519	520	524	527	525	529	529	533	532	527
2	532	533	531	532	535	541	540	531	518	500	500	481	486	497	478	478	514	494	486	509	501	514	513	532	511
3 d	523	516	514	522	505	554	508	493	474	495	493	490	501	513	492	520	522	522	520	541	531	512	552	517	514
4 d	525	528	505	505	514	541	486	481	532	493	454	418	462	496	516	533	586	547	476	481	473	512	495	501	503
5	506	497	497	491	497	510	506	505	494	473	466	462	463	470	494	490	500	513	510	512	513	519	529	515	497
6	508	516	504	506	515	520	520	513	505	493	477	473	486	495	508	513	524	524	524	521	520	529	521	521	510
7 q	520	513	514	517	520	518	525	524	513	500	489	479	481	500	508	519	525	528	524	524	525	527	526	528	514
8	526	548	555	492	531	526	539	515	497	512	503	492	488	501	513	500	545	512	521	513	517	517	521	526	517
9	528	516	510	512	512	513	521	517	513	503	498	486	505	497	517	514	525	536	535	532	526	540	533	526	517
10	525	524	524	521	521	522	521	515	509	499	493	485	488	494	506	519	528	539	540	542	542	542	526	517	518
11 d	496	493	489	517	502	510	513	494	450	455	448	447	441	467	485	477	499	509	505	509	511	513	512	514	*490*
12	513	516	516	514	516	520	517	516	509	496	490	481	481	486	505	505	510	512	521	527	520	525	521	528	510
13	535	519	519	518	520	518	517	516	505	494	481	478	498	544	521	536	521	512	528	516	535	517	515	505	515
14	376	451	473	516	512	512	513	500	489	480	474	471	481	494	513	532	524	529	530	528	528	525	521	520	500
15	518	519	517	516	515	513	511	503	497	490	485	485	485	500	510	517	524	526	535	536	530	522	527	526	513
16	527	525	517	521	529	512	513	505	489	478	481	473	475	476	505	517	529	542	547	542	530	532	501	489	511
17 d	458	461	389	468	513	505	454	478	477	455	442	474	484	505	505	526	544	529	524	531	529	525	532	524	493
18 d	519	504	505	504	517	512	497	489	467	467	446	454	461	520	525	524	508	532	571	520	513	523	532	510	505
19	524	500	496	513	506	515	524	512	501	474	457	477	481	489	506	508	528	543	532	536	532	517	522	522	509
20	513	513	515	514	510	517	517	514	504	489	490	489	475	488	501	529	522	528	536	532	530	529	525	527	513
21 q	520	517	513	516	517	515	515	513	506	489	478	482	494	509	522	521	520	535	545	533	532	525	528	525	515
22 q	524	528	528	524	522	524	524	520	515	501	493	490	496	506	518	522	533	533	536	537	539	536	536	533	522
23	533	535	536	533	540	544	540	544	545	520	495	487	498	446	510	512	524	552	559	540	528	525	529	534	525
24	500	508	519	519	525	528	531	517	510	489	481	483	501	506	499	516	528	541	541	532	533	528	528	524	516
25 q	519	517	514	516	515	513	509	505	501	491	482	478	484	499	513	520	527	533	536	536	536	532	530	529	514
26 q	528	524	519	516	522	520	519	518	518	502	490	482	492	504	515	517	528	536	534	539	536	536	536	532	519
27	533	533	529	528	525	524	520	519	513	509	512	511	512	519	536	537	551	565	553	522	520	528	531	545	*528*
28	489	458	504	520	501	506	508	503	500	489	478	486	501	514	513	528	529	537	536	530	533	532	544	522	511
29	513	520	514	513	516	517	517	506	504	497	493	495	505	514	520	526	530	530	533	532	532	536	539	528	518
30	528	526	525	525	529	532	529	529	525	517	508	509	513	497	528	525	517	537	535	529	535	533	540	540	525
Mean	513	513	511	515	518	522	517	511	504	492	483	*480*	488	499	510	517	526	*530*	*530*	527	525	526	527	523	513

MAGNETIC DECLINATION (WEST)

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

115 ESKDALEMUIR (D) — 12° + — APRIL 1942

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	40·5	40·7	39·4	38·8	40·5	41·4	38·6	37·7	36·9	38·4	40·4	43·4	47·3	49·6	46·0	45·1	44·0	42·3	41·4	41·6	38·8	41·4	41·6	42·2	41·6
2	42·0	43·2	42·1	42·1	41·7	40·3	40·4	41·0	42·6	46·4	46·9	48·1	49·5	55·1	53·3	52·8	46·6	48·8	43·3	35·2	37·5	32·1	35·9	39·9	*43·6*
3 d	39·7	39·9	41·9	40·5	49·5	48·6	48·4	49·0	44·3	44·9	44·9	46·9	47·9	52·0	47·9	45·3	43·6	42·2	40·9	42·2	41·4	36·7	28·1	37·9	43·5
4 d	39·0	38·7	35·9	35·3	38·9	36·9	45·2	55·2	42·3	41·1	42·1	45·1	54·2	56·6	57·4	55·3	49·5	42·5	30·8	26·2	43·2	34·5	35·8	42·3	42·7
5	40·2	41·4	40·9	42·5	44·1	40·2	38·7	38·2	37·7	38·7	39·9	43·2	46·3	47·2	46·9	46·1	44·2	41·0	41·1	40·4	40·6	41·2	41·6	40·5	41·8
6	39·1	39·2	38·8	41·6	42·1	40·4	40·5	38·7	37·8	38·4	40·4	43·2	45·8	47·5	47·1	45·9	44·0	42·6	41·6	41·3	40·6	39·8	39·5	39·1	41·5
7 q	39·6	40·0	39·5	39·6	39·5	40·1	40·4	39·5	38·0	37·6	39·2	42·4	45·9	47·8	47·1	45·6	44·2	43·2	42·6	42·4	42·2	41·7	39·4	37·6	41·5
8	37·8	41·4	36·8	25·2	32·1	36·8	37·2	40·7	46·8	45·2	41·5	43·4	47·4	51·7	51·7	50·4	47·7	42·4	33·9	35·3	38·9	40·4	41·6	40·4	41·1
9	40·5	38·9	39·7	39·4	39·4	39·8	39·6	39·6	39·5	39·1	40·8	42·4	46·0	47·7	47·0	43·0	42·5	43·3	43·1	42·4	40·7	37·1	38·9	41·3	41·3
10	41·3	40·6	40·5	40·4	39·7	39·2	38·2	37·2	37·1	38·1	40·5	43·2	45·9	47·7	47·4	45·9	44·7	44·0	43·4	43·2	43·1	42·4	39·6	32·2	41·5
11 d	33·3	29·8	32·6	25·2	28·9	38·0	34·4	35·7	41·7	47·8	46·4	46·9	52·9	50·4	49·7	47·9	44·9	44·1	41·2	42·3	41·4	38·7	41·5	41·1	40·7
12	40·7	41·2	40·6	40·2	39·8	39·3	37·9	35·9	35·4	37·1	40·7	44·6	47·9	49·0	48·8	47·1	44·4	42·4	41·3	40·0	39·4	40·7	41·7	42·0	41·6
13	43·1	41·5	40·0	40·0	39·9	39·5	39·0	37·0	35·9	36·8	39·9	44·9	49·2	54·2	53·9	49·7	45·3	43·0	35·8	40·0	34·1	35·5	35·8	32·6	41·1
14	31·1	35·3	37·9	37·6	37·8	40·7	38·7	33·6	33·6	35·2	38·8	42·2	46·2	47·8	47·5	46·2	44·3	43·4	42·2	41·5	41·5	41·4	41·2	40·8	40·3
15	40·7	40·5	40·4	39·9	39·5	39·2	38·1	37·7	37·2	37·6	39·0	43·0	46·1	47·9	47·5	46·0	44·4	42·6	41·7	40·4	40·7	41·2	41·4	41·2	41·4
16	41·4	41·0	41·4	42·3	36·0	36·8	37·6	36·0	39·0	42·9	41·9	45·4	49·3	50·3	47·9	45·8	44·9	43·7	41·8	42·0	40·7	33·3	32·3	30·8	41·0
17 d	26·3	13·1	27·0	32·3	28·0	32·0	37·6	41·9	39·0	41·8	44·9	47·4	48·3	52·0	53·4	48·5	48·5	47·6	47·7	44·2	42·1	40·8	37·6	35·0	39·9
18 d	39·1	37·1	40·2	41·6	40·0	39·7	41·3	43·1	40·3	37·8	41·8	47·3	50·6	52·0	49·8	50·0	46·2	45·1	34·2	41·8	40·1	40·0	45·0	41·3	42·7
19	36·9	34·5	39·4	38·6	38·8	37·8	38·9	37·5	36·9	37·1	39·4	43·0	47·3	48·6	47·7	46·1	45·0	43·9	42·2	39·2	38·0	40·3	40·7	41·2	40·8
20	41·2	38·9	44·1	40·5	40·4	39·5	37·9	36·8	35·4	36·8	39·5	43·5	48·6	50·6	48·7	48·4	44·8	41·6	42·2	40·2	40·0	40·5	39·9	39·9	41·7
21 q	40·6	41·3	42·1	40·5	39·5	38·6	37·2	36·8	36·7	37·1	39·4	42·5	45·8	47·5	46·9	45·1	43·9	43·2	42·5	40·6	40·5	40·5	41·2	40·8	41·3
22 q	40·6	40·8	42·2	39·8	38·9	38·6	37·8	36·9	36·1	36·8	38·9	41·9	45·2	47·5	47·7	46·2	45·1	43·8	42·5	42·3	42·2	42·1	41·5	41·3	41·5
23	41·2	41·1	40·3	39·6	38·8	37·2	36·6	35·0	34·1	36·1	41·3	44·9	50·7	49·3	50·6	50·5	47·4	38·2	35·0	34·3	39·9	41·6	43·1	38·4	41·1
24	46·0	44·9	45·9	40·1	39·8	38·9	38·0	36·4	37·8	39·3	41·7	44·9	46·9	48·4	46·6	44·1	42·5	41·4	40·7	40·3	41·3	41·6	40·8	41·2	42·1
25 q	41·3	40·7	39·9	39·5	38·7	37·1	35·4	35·1	35·2	36·9	38·8	42·4	44·8	45·8	45·0	43·3	41·6	41·2	40·8	41·5	42·2	42·0	41·9	41·3	40·5
26 q	41·2	40·7	39·8	39·5	38·2	35·9	35·1	35·3	36·1	36·9	39·6	42·3	44·8	45·7	44·8	43·4	43·1	42·2	41·5	41·6	41·7	41·7	41·8	40·6	40·6
27	41·1	40·5	39·8	39·4	38·6	37·6	36·9	36·6	36·9	39·4	42·3	44·8	45·3	45·4	46·2	44·9	46·1	47·1	44·4	37·8	39·5	38·5	41·2	41·7	41·3
28	27·1	27·1	38·1	37·2	36·2	33·4	33·3	34·3	37·0	40·0	43·3	45·0	46·7	47·8	45·2	42·6	42·6	42·3	42·1	41·6	41·6	41·3	37·6	38·8	*39·3*
29	40·0	41·3	40·7	40·4	38·6	37·7	36·9	37·1	37·8	38·8	40·7	43·6	45·7	45·8	44·3	43·3	42·6	42·3	42·2	41·5	41·5	41·5	39·2	38·1	40·9
30	37·8	38·9	38·7	38·5	37·9	37·1	37·0	37·2	37·7	37·5	39·5	44·0	49·5	50·8	51·3	47·1	46·0	44·8	41·0	41·3	41·7	42·3	42·3	41·2	41·7
Mean	39·0	38·5	39·5	38·6	38·7	38·6	38·4	38·4	*38·1*	39·3	41·1	44·2	47·6	*49·3*	48·5	46·7	44·8	43·2	40·8	40·1	40·6	39·8	39·7	39·4	41·4

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

116 ESKDALEMUIR (V) — 44,000γ (0·44 C.G.S. unit) + — APRIL 1942

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	1051	1052	1048	1043	1043	1038	1037	1036	1037	1039	1035	1030	1026	1025	1033	1044	1048	1052	1053	1049	1048	1047	1047	1046	1042
2	1047	1046	1048	1048	1044	1044	1044	1043	1040	1040	1037	1043	1053	1072	1087	1096	1125	1129	1136	1115	1078	1054	1047	1038	1065
3 d	1014	1038	1044	1039	1006	968	991	1000	1013	1023	1031	1037	1044	1053	1065	1075	1067	1061	1059	1054	1055	1061	1048	1039	1037
4 d	1039	1032	1026	1037	1047	1044	1035	1006	1016	1024	1032	1059	1055	1055	1060	1096	1187	1205	1171	1145	1013	1065	1068	1057	*1066*
5	1046	1050	1054	1057	1053	1050	1054	1054	1054	1055	1058	1056	1055	1061	1074	1072	1072	1076	1072	1068	1065	1059	1051	1045	1059
6	1047	1048	1053	1051	1046	1048	1054	1054	1055	1055	1053	1048	1044	1047	1051	1055	1057	1059	1060	1061	1061	1054	1054	1052	1053
7 q	1050	1051	1054	1054	1055	1055	1054	1055	1054	1054	1050	1046	1042	1043	1052	1056	1057	1058	1057	1057	1057	1057	1060	1057	1054
8	1053	1042	995	1000	1024	1036	1039	1041	1038	1041	1043	1038	1031	1036	1048	1060	1069	1100	1109	1097	1078	1069	1063	1057	1050
9	1053	1050	1054	1057	1058	1057	1056	1055	1054	1050	1047	1048	1044	1044	1056	1066	1065	1060	1057	1056	1057	1056	1049	1049	1054
10	1051	1054	1054	1054	1054	1055	1056	1056	1054	1050	1047	1043	1038	1041	1047	1050	1050	1050	1051	1051	1051	1054	1060	1061	1051
11 d	1048	1021	987	975	976	983	1012	1034	1039	1047	1054	1060	1060	1081	1110	1117	1102	1092	1084	1076	1071	1067	1062	1061	1051
12	1063	1062	1062	1062	1061	1060	1061	1061	1059	1056	1051	1047	1045	1051	1057	1066	1065	1069	1066	1065	1066	1062	1060	1056	1060
13	1041	1049	1054	1056	1056	1056	1057	1060	1061	1054	1047	1041	1040	1051	1074	1101	1111	1106	1096	1075	1072	1048	1002	967	1057
14	900	805	829	959	1026	1041	1048	1057	1056	1054	1054	1047	1042	1047	1054	1060	1060	1059	1060	1060	1057	1057	1057	1057	*1023*
15	1057	1059	1059	1058	1059	1060	1060	1057	1054	1051	1050	1044	1040	1042	1048	1054	1057	1059	1060	1061	1062	1062	1060	1057	1055
16	1057	1056	1051	1045	1041	1044	1042	1042	1044	1044	1048	1046	1043	1044	1050	1055	1060	1071	1086	1087	1078	1054	1029	1035	1052
17 d	1005	954	910	904	988	1035	1033	1023	1036	1041	1052	1065	1065	1062	1078	1106	1116	1118	1107	1096	1087	1079	1073	1059	1045
18 d	1053	1054	1048	1039	1048	1041	1035	1033	1031	1033	1036	1040	1050	1079	1101	1114	1105	1093	1083	1066	1069	1059	1035	1010	1056
19	1018	1028	1024	1020	1030	1038	1039	1047	1051	1050	1047	1037	1034	1045	1054	1060	1063	1071	1078	1083	1075	1066	1062	1056	1049
20	1047	1044	1038	1042	1050	1054	1057	1057	1056	1054	1047	1039	1042	1048	1053	1062	1078	1081	1072	1072	1067	1062	1058	1054	1056
21 q	1054	1055	1055	1056	1057	1059	1059	1056	1055	1051	1048	1041	1033	1036	1047	1057	1060	1061	1065	1066	1063	1061	1058	1057	1055
22 q	1056	1054	1053	1053	1054	1055	1055	1055	1054	1048	1037	1026	1024	1026	1031	1039	1046	1053	1054	1054	1053	1054	1054	1054	1048
23	1053	1051	1051	1051	1049	1049	1047	1043	1036	1028	1024	1024	1023	1039	1043	1065	1090	1107	1105	1090	1074	1065	1054	1026	1054
24	1011	981	997	1026	1044	1045	1049	1050	1047	1042	1045	1048	1043	1051	1061	1062	1065	1071	1071	1067	1060	1059	1057	1057	1046
25 q	1057	1057	1059	1060	1062	1063	1061	1059	1057	1048	1045	1038	1037	1041	1044	1048	1051	1056	1058	1055	1054	1055	1055	1054	1053
26 q	1054	1055	1055	1056	1054	1054	1054	1051	1046	1048	1044	1036	1036	1042	1048	1049	1049	1053	1054	1055	1054	1054	1054	1054	1050
27	1053	1053	1054	1054	1054	1056	1053	1048	1045	1041	1036	1034	1039	1041	1048	1059	1062	1080	1102	1111	1094	1073	1062	1037	1058
28	996	946	946	1014	1029	1041	1047	1050	1053	1056	1054	1047	1042	1048	1060	1066	1063	1060	1057	1059	1055	1057	1054	1050	1040
29	1054	1054	1054	1054	1054	1054	1051	1050	1044	1049	1048	1047	1045	1048	1051	1054	1055	1057	1056	1055	1054	1056	1055	1053	1052
30	1052	1055	1056	1056	1054	1051	1049	1044	1042	1039	1035	1032	1036	1038	1047	1057	1070	1076	1089	1081	1068	1064	1059	1057	1054
Mean	1039	1032	*1029*	1036	1043	1045	1046	1046	1046	1045	1045	1043	1042	1048	1058	1067	1074	*1078*	1078	1073	1063	1060	1054	1047	1051

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

117 ESKDALEMUIR — APRIL 1942

	TERRESTRIAL MAGNETIC ELEMENTS												3-hr. range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination			Vertical force							
	Maximum 16,000γ +		Minimum 16,000γ +		Range	Maximum 12° +	Minimum 12° +	Range	Maximum 44,000γ +		Minimum 44,000γ +		Range				
	h. m.	γ	γ	h. m.	γ	h. m. ′	′ h. m.	′	h. m.	γ	γ	h. m.	γ				°A.
1	6 52	559	481	14 14	78	13 44 50·5	35·9 8 36	14·6	17 30	1054	1024	13 20	30	2,3,2,2,3,2,2,1	17	1	82·6
2	23 54	572	451	14 8	121	13 9 56·5	28·6 21 32	27·9	18 10	1141	1012	24 0	129	2,2,3,3,4,3,4,4	25	1	82·6
3 d	22 24	595	464	4 31	131	4 46 60·2	17·4 22 18	42·8	15 23	1078	953	5 8	125	4,4,3,2,3,2,4,4	26	1	82·6
4 d	16 39	*700*	322	20 23	*378*	20 18 *67·3*	*1·0* 19 58	*66·3*	16 49	*1248*	942	20 18	*306*	3,3,5,5,4,6,7,3	36	2	82·6
5	22 0	539	455	13 28	84	13 10 48·5	37·2 8 29	11·3	17 34	1078	1042	0 26	36	3,3,1,2,3,3,1,2	18	1	82·6
6	21 8	552	469	11 8	83	13 30 47·8	37·0 8 46	10·8	19 10	1062	1044	4 58	18	2,2,1,2,2,1,1,3	14	0	82·7
7 q	21 8	532	471	12 21	61	13 35 48·6	36·9 23 10 / 24 0	11·7	22 10	1061	1039	12 35	22	1,1,1,2,2,1,1,2	11	0	82·7
8	16 55	586	473	17 15	113	13 58 54·0	22·5 3 30	31·5	17 55	1112	984	2 48	128	4,4,4,3,4,5,3,2	29	1	82·7
9	21 23	558	474	11 7	84	13 58 49·4	35·6 21 22	13·8	15 52	1068	1044	12 58	24	2,2,2,2,3,2,1,3	17	1	82·7
10	20 43	548	481	11 49	67	13 27 48·6	30·6 23 44	18·0	23 10	1067	1037	12 44	30	1,1,1,2,1,2,1,3	12	0	82·8
11 d	3 3	555	416	13 25	139	12 32 54·2	18·3 3 40	35·9	15 26	1121	960	2 46	161	4,4,4,3,4,4,3,3	29	1	82·8
12	23 44	536	474	11 6	62	15 7 49·7	35·1 8 18	14·6	17 25	1071	1044	12 0	27	1,1,1,2,3,3,2,2	15	0	82·8
13	20 53	582	443	23 54	139	14 10 55·8	26·3 20 49	29·5	16 25	1114	949	23 53	165	3,1,2,3,4,3,4,5	25	2	82·8
14	15 37	592	*285*	0 51	307	15 37 49·9	21·7 0 33	28·2	18 31	1062	*780*	1 9	282	6,5,3,3,3,4,2,2	28	2	82·8
15	18 20 / 19 56	540	477	11 12	63	13 39 48·5	36·8 7 29	11·7	20 55	1066	1038	12 40	28	1,1,1,2,2,2,2,2	13	0	82·8
16	18 40	559	462	12 12	97	13 11 51·5	28·8 24 0	22·7	19 57	1096	1022	22 42	74	2,3,3,2,3,3,3,4	23	1	82·8
17 d	23 0	572	329	2 14	243	14 43 54·0	4·8 1 58	49·2	16 46	1121	865	3 18	256	5,5,4,4,3,3,3,4	31	2	82·7
18 d	18 29	612	427	10 39	185	13 40 54·8	28·9 18 41	25·9	15 30 / 16 0	1118	1006	23 20	112	3,3,3,3,5,4,5,3	29	1	82·7
19	19 24	552	447	10 29	105	13 19 49·6	34·1 1 31	15·5	19 13	1084	1014	0 10	70	3,2,2,3,3,3,3,2	21	1	82·7
20	17 50 / 18 50	540	463	12 35	77	13 27 52·2	35·0 8 32	17·2	17 10	1087	1033	2 42	54	3,2,1,2,3,3,2,1	17	1	82·8
21 q	18 26	550	478	10 38	72	14 47 47·8	36·0 8 28	11·8	19 41	1066	1030	12 38	36	1,1,1,0,3,2,2,1	11	0	82·8
22 q	19 41	540	489	1 14	*51*	14 23 47·9	36·0 8 39	11·9	0 1	1057	1023	12 29	34	2,1,1,1,2,2,0,0	9	0	82·8
23	17 7	597	425	13 12	172	15 9 54·8	29·2 19 15	25·6	17 42	1111	1018	12 11	93	1,2,3,3,5,5,4,3	26	1	82·8
24	17 54	554	474	10 20	80	0 36 55·1	34·7 0 1	20·4	18 10	1072	975	1 52	97	4,3,2,2,2,3,2,1	19	1	82·8
25 q	19 12	540	476	11 20	64	13 30 46·0	35·0 7 50	11·0	5 32	1065	1036	12 20	29	0,1,1,1,2,1,1,1	8	0	82·8
26 q	19 53	544	481	11 5	63	13 39 45·8	35·0 7 0	10·8	3 20	1056	1035	12 9	21	1,2,2,2,2,2,1,1	13	0	82·9
27	18 27	575	500	12 28	75	17 40 48·7	33·8 19 45	14·9	19 35	1115	996	24 0	119	1,1,1,2,3,4,4,4	20	1	82·9
28	22 11	559	407	1 50	152	13 24 48·5	15·7 1 32	32·8	15 30	1067	874	2 2	193	5,3,3,2,2,2,2,3	22	1	83·0
29	22 19	545	493	11 10	52	13 6 45·9	35·3 22 59	*10·6*	18 15	1059	1044	12 12	*15*	2,1,1,1,0,1,1,2	9	0	83·1
30	14 6	559	482	13 21	77	14 39 52·8	35·3 6 24	17·5	18 38	1090	1031	11 26	59	1,1,2,2,4,3,3,3	19	1	83·1
Mean	- -	565	449	- -	116	- - 51·5	29·3 - -	22·2	- -	1089	996	- -	92	2·5	17·7	0·80	82·8

q denotes an international quiet day and d an international disturbed day.

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

118 ESKDALEMUIR (H) — 16,000γ (0·16 C.G.S. unit) + — MAY 1942

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	532	526	540	524	531	546	524	493	502	492	478	480	489	501	513	521	536	540	533	533	531	528	528	528	519
2	529	525	524	521	524	516	502	494	496	490	466	467	489	509	515	533	545	538	533	536	528	524	517	517	*514*
3	515	522	517	520	522	512	506	508	505	495	497	497	504	510	517	523	529	533	538	544	538	533	545	541	520
4 d	530	525	523	529	528	528	525	520	517	513	505	506	515	529	551	572	552	551	572	560	517	496	470	489	526
5 d	495	532	520	512	528	529	514	505	499	486	478	492	498	505	504	516	532	537	544	543	535	547	535	522	517
6	523	521	524	518	521	523	529	526	517	510	506	505	501	512	518	519	528	529	540	545	539	537	536	533	523
7	529	528	524	526	521	524	525	533	525	515	513	508	510	513	523	532	540	547	548	543	544	545	541	544	529
8	537	535	529	525	532	537	536	532	525	517	513	506	509	517	534	535	538	547	552	551	556	557	552	545	534
9 q	540	540	540	540	539	538	536	536	533	527	513	505	503	511	520	526	533	540	544	540	539	539	542	539	532
10	540	533	538	531	533	533	532	529	528	525	525	526	525	521	523	529	537	545	545	547	552	563	567	565	537
11	553	556	547	543	545	544	535	528	522	522	516	520	524	526	532	534	535	541	539	538	540	541	540	537	536
12 q	536	536	533	536	536	536	536	533	525	516	505	503	512	520	529	533	553	551	542	537	541	538	533	530	531
13 q	526	527	526	527	530	530	528	524	517	505	500	498	504	512	516	520	535	544	545	543	542	545	547	556	527
14 d	554	555	560	566	559	539	508	541	515	499	509	512	499	501	501	515	531	551	547	546	534	529	528	530	530
15	529	528	533	531	532	526	527	517	511	511	504	500	498	507	525	539	539	549	552	543	540	525	528	520	526
16	519	520	523	520	523	527	520	516	511	505	501	504	503	518	521	539	545	564	564	552	540	535	530	532	526
17	527	534	531	529	531	527	520	514	509	505	505	512	519	523	532	547	550	547	550	555	541	534	534	531	529
18	535	535	532	536	532	528	524	514	511	507	497	498	507	511	524	543	546	555	554	553	547	537	537	532	529
19	528	528	530	524	528	528	527	519	509	508	505	504	504	512	518	536	547	558	551	551	546	543	537	535	528
20	537	536	535	534	533	527	526	523	525	524	517	514	508	514	528	543	567	558	546	559	557	555	551	538	536
21	538	530	526	532	536	534	536	533	524	513	502	493	507	523	531	523	545	554	559	551	540	543	536	532	531
22	531	533	538	532	536	535	526	493	504	518	515	507	505	511	516	535	551	570	563	546	517	515	523	531	527
23	528	528	527	527	527	532	530	526	519	508	500	505	504	511	519	528	539	568	562	551	556	533	531	535	529
24	535	534	534	532	539	532	534	527	519	504	495	496	504	518	524	538	532	552	555	543	544	539	535	532	529
25	538	531	532	531	532	527	521	519	519	519	509	515	519	520	524	529	540	545	548	546	546	543	538	535	530
26 q	532	531	532	535	532	528	521	512	505	504	506	512	512	516	527	532	539	547	551	550	548	543	540	540	529
27 d	543	542	540	543	543	540	537	531	531	528	527	507	524	562	544	573	586	563	555	590	543	539	535	532	*544*
28 d	527	528	525	525	512	485	477	489	489	486	486	492	505	504	531	531	544	543	547	540	550	532	537	539	518
29	523	518	515	520	519	511	516	509	501	494	498	497	494	507	522	532	554	555	553	544	542	535	535	534	522
30	535	536	541	528	528	523	514	503	501	496	505	505	507	519	528	531	534	541	544	541	543	536	535	528	525
31 q	531	527	531	531	531	527	519	511	502	505	504	508	516	531	535	535	545	550	546	544	546	543	540	538	529
Mean	531	532	531	530	531	528	523	518	513	508	503	*503*	507	516	524	534	543	549	*549*	547	541	537	535	533	528

MAGNETIC DECLINATION (WEST)

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

119 ESKDALEMUIR (D) — 12° + — MAY 1942

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	39·9	38·8	37·0	34·5	33·3	33·7	35·1	36·1	40·4	38·4	40·3	44·1	46·6	47·1	46·8	46·0	44·4	44·0	42·4	41·7	40·7	40·5	40·3	40·0	40·5
2	39·8	39·6	39·6	39·7	39·2	37·0	39·4	39·7	39·4	39·9	42·2	48·0	49·4	50·7	50·6	49·0	49·8	47·7	44·4	43·2	40·3	39·9	38·9	36·6	*42·7*
3	38·2	36·5	37·9	37·7	38·5	38·2	38·6	36·5	36·3	37·0	39·3	41·8	43·5	44·3	45·0	44·5	44·3	43·4	43·1	42·1	41·3	40·1	39·8	36·0	40·2
4 d	37·8	38·6	39·1	38·6	37·2	37·1	36·0	35·5	36·5	36·8	39·4	42·8	45·1	47·2	49·7	51·5	50·4	48·9	43·1	43·5	36·2	29·7	27·8	27·8	39·8
5 d	24·9	26·8	23·0	25·1	27·1	30·1	35·8	38·1	39·7	41·6	44·7	46·6	46·8	47·6	46·0	44·3	44·2	43·1	42·1	40·5	40·4	38·6	35·4	35·7	*37·8*
6	31·5	32·3	32·8	33·3	36·1	37·0	36·8	36·1	36·1	38·0	40·7	43·2	45·0	45·9	46·2	45·9	44·8	43·1	42·4	42·3	41·4	41·4	41·3	40·7	39·8
7	40·5	40·3	39·9	39·0	37·9	37·8	37·8	38·6	37·7	38·6	40·5	42·5	43·5	43·4	44·0	43·4	43·3	43·2	43·1	42·3	41·8	41·4	41·5	40·6	40·9
8	39·9	39·6	38·9	39·7	39·7	38·6	37·7	36·7	36·8	37·8	40·3	43·5	47·0	47·7	47·6	46·9	45·8	44·4	43·3	42·2	42·1	42·1	40·9	40·4	41·7
9 q	39·7	39·6	39·4	38·9	38·1	37·7	37·3	36·2	35·1	36·0	38·8	41·5	43·9	45·0	44·5	43·3	42·5	42·3	41·7	41·3	40·6	40·5	40·4	40·4	40·2
10	40·6	39·9	40·7	39·6	37·1	36·6	36·7	37·0	37·8	39·8	41·6	44·1	46·0	46·8	46·6	45·1	43·9	43·1	42·5	42·1	41·6	42·1	41·5	41·4	41·4
11	37·3	37·9	39·1	39·2	38·0	36·2	36·7	36·9	38·5	40·4	42·1	44·3	45·9	45·9	45·1	44·5	43·7	42·7	41·5	40·7	40·6	40·4	40·6	40·6	40·8
12 q	40·6	40·5	40·4	39·8	38·8	36·9	35·4	35·3	35·2	36·2	39·6	43·0	45·3	45·6	44·0	42·5	42·4	40·7	40·4	40·5	41·2	41·3	40·4	40·1	40·3
13 q	39·4	39·5	39·8	38·7	38·0	36·5	36·8	36·5	36·8	37·9	40·5	43·4	45·8	46·8	45·8	44·3	43·3	41·5	40·6	40·4	40·6	41·2	41·3	41·5	40·7
14 d	39·7	38·7	38·6	37·0	33·3	36·2	43·6	42·3	39·8	41·8	40·8	42·7	45·9	47·4	47·2	46·3	44·9	44·2	42·5	42·5	41·3	39·9	39·7	39·7	41·5
15	39·5	39·4	39·1	39·5	40·8	39·4	37·1	36·0	36·1	37·1	41·2	44·4	47·2	48·7	48·8	47·4	45·2	43·9	43·1	41·2	36·3	37·3	38·8	37·1	41·0
16	38·9	38·9	38·8	37·9	37·8	37·1	35·5	34·5	34·3	36·8	39·6	42·3	44·4	44·9	45·0	44·9	44·7	44·4	44·0	38·0	37·6	39·9	39·6	39·8	40·0
17	39·1	42·1	39·5	40·2	38·9	37·1	36·1	35·2	35·2	37·2	39·6	43·1	46·1	46·9	47·0	46·6	46·0	45·3	42·9	39·9	39·6	39·8	40·6	39·2	41·0
18	39·5	40·4	38·0	37·6	36·0	36·5	36·2	36·0	35·8	37·9	41·5	43·4	46·3	47·8	47·5	47·0	46·3	44·9	43·4	42·4	41·3	38·9	39·9	38·8	41·0
19	39·8	39·5	39·5	37·9	38·0	36·8	36·2	37·7	36·9	38·7	38·9	43·0	46·2	47·0	46·8	46·6	44·9	43·1	41·7	39·9	40·0	40·5	39·7	39·7	40·8
20	39·7	39·5	39·0	38·7	37·7	35·3	34·4	33·4	34·0	33·6	36·0	38·9	41·4	43·7	46·5	49·3	49·3	47·5	44·0	42·3	42·2	40·1	39·6	36·8	40·1
21	38·9	41·6	45·2	39·4	37·0	36·1	36·0	36·0	35·9	36·7	38·9	43·2	45·8	46·2	46·7	45·3	44·8	44·2	43·7	43·1	41·2	41·4	38·5	38·8	41·0
22	39·7	40·5	40·3	38·7	37·8	37·0	34·9	38·6	43·3	38·0	38·4	41·9	43·6	45·8	46·7	45·7	45·0	46·8	43·2	37·3	33·7	37·9	39·6	38·9	40·6
23	40·7	39·0	38·9	38·8	38·8	37·3	36·5	35·5	35·8	36·5	36·1	38·6	40·8	42·3	43·8	44·4	43·3	43·5	42·5	41·6	41·4	38·4	37·6	38·8	39·6
24	39·7	39·5	39·5	38·2	38·9	34·9	34·7	33·5	34·0	35·1	37·5	40·5	44·2	45·8	45·4	45·6	43·3	42·0	40·6	40·4	39·1	39·8	39·6	40·0	39·7
25	37·3	39·5	39·5	38·8	37·8	36·3	36·0	36·0	36·2	39·0	42·6	43·5	44·5	45·1	44·9	43·5	43·0	41·8	41·3	41·4	41·3	41·4	41·4	41·2	40·6
26 q	40·7	39·9	39·5	38·8	37·9	36·7	35·5	35·2	35·3	36·7	40·5	44·3	46·6	46·1	44·5	42·5	42·4	42·3	42·6	42·5	42·1	41·7	41·3	40·5	40·7
27 d	40·7	40·6	39·8	39·4	38·1	35·2	34·3	34·1	33·7	35·4	41·1	47·0	49·8	52·7	51·0	50·9	49·9	44·3	40·8	36·1	37·3	36·0	33·2	38·7	40·8
28 d	37·3	38·8	36·3	36·2	37·1	42·7	42·7	42·7	40·9	39·1	41·9	44·4	47·3	47·7	46·7	43·6	43·1	43·1	43·1	41·7	38·6	40·8	39·7	37·9	41·4
29	39·6	38·9	39·4	37·9	37·7	37·7	35·9	35·3	36·1	38·0	40·2	43·0	45·0	44·5	44·0	42·4	42·2	41·4	40·0	39·9	40·6	40·6	40·6	40·4	40·1
30	40·1	38·9	39·5	34·4	34·1	33·4	33·4	33·7	34·3	36·8	39·5	43·0	44·3	44·9	44·8	43·4	41·2	40·0	40·1	40·4	36·3	38·0	39·0	38·8	38·8
31 q	38·6	38·1	38·7	38·6	37·2	36·1	35·2	35·2	36·0	38·7	41·0	44·3	46·9	47·8	47·0	46·4	44·1	43·2	42·2	41·5	40·6	39·6	40·4	40·3	40·7
Mean	38·7	38·8	38·6	37·8	37·2	36·6	36·6	*36·5*	36·8	37·8	40·2	43·2	45·5	*46·4*	46·3	45·6	44·7	43·7	42·3	41·1	40·0	39·7	39·3	38·9	40·5

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

120 ESKDALEMUIR (V) — 44,000γ (0·44 C.G.S. unit) + — MAY 1942

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	1059	1057	1042	1036	1032	1021	1017	1017	1013	1033	1036	1037	1036	1039	1050	1059	1062	1063	1060	1058	1057	1057	1057	1057	1044
2	1056	1057	1059	1057	1055	1056	1054	1049	1046	1042	1044	1042	1045	1056	1072	1087	1098	1096	1089	1080	1078	1073	1053	1051	*1062*
3	1043	1045	1042	1047	1048	1051	1055	1054	1048	1043	1042	1042	1044	1044	1048	1051	1054	1056	1057	1057	1060	1060	1050	1045	1049
4 d	1048	1051	1053	1048	1048	1048	1045	1044	1043	1040	1036	1033	1033	1039	1045	1054	1068	1081	1090	1084	1095	1067	1062	1060	1055
5 d	1048	957	984	999	1008	1010	1018	1029	1033	1040	1039	1038	1045	1054	1056	1056	1055	1059	1062	1065	1065	1054	1045	1047	*1036*
6	1038	1036	1037	1038	1039	1043	1043	1043	1042	1042	1041	1039	1041	1041	1047	1051	1056	1060	1060	1059	1056	1054	1054	1053	1046
7	1054	1055	1056	1055	1055	1055	1054	1053	1053	1048	1041	1036	1036	1042	1046	1049	1053	1054	1055	1055	1055	1054	1054	1050	1051
8	1050	1050	1051	1054	1050	1049	1049	1049	1045	1041	1033	1033	1036	1039	1042	1048	1050	1054	1055	1055	1054	1051	1051	1052	1048
9 q	1054	1053	1051	1052	1053	1054	1051	1047	1043	1042	1036	1032	1033	1035	1039	1044	1048	1050	1053	1054	1054	1054	1051	1050	1047
10	1050	1050	1045	1040	1040	1042	1041	1038	1036	1029	1026	1025	1024	1026	1035	1043	1045	1050	1049	1049	1048	1044	1043	1041	1040
11	1036	1037	1041	1043	1042	1042	1044	1044	1043	1037	1029	1025	1027	1035	1041	1044	1046	1050	1054	1054	1054	1049	1048	1048	1042
12 q	1049	1049	1050	1051	1054	1050	1048	1044	1039	1039	1032	1027	1024	1032	1038	1044	1051	1063	1068	1065	1060	1056	1054	1049	1047
13 q	1047	1049	1050	1053	1055	1056	1055	1054	1050	1048	1039	1032	1036	1044	1045	1048	1051	1054	1054	1050	1048	1049	1048	1048	1048
14 d	1045	1044	1045	1045	1046	1048	1042	1020	1023	1027	1027	1033	1035	1041	1055	1065	1066	1063	1062	1059	1059	1060	1057	1055	1047
15	1055	1054	1054	1051	1042	1039	1038	1042	1042	1044	1043	1042	1042	1045	1048	1052	1059	1060	1060	1062	1069	1065	1059	1056	1051
16	1055	1055	1055	1056	1054	1050	1049	1048	1045	1036	1030	1029	1032	1038	1044	1045	1051	1055	1062	1071	1069	1062	1060	1058	1050
17	1054	1046	1046	1050	1050	1054	1053	1050	1048	1039	1033	1034	1038	1044	1044	1044	1048	1054	1066	1069	1066	1060	1056	1054	1050
18	1048	1038	1035	1043	1045	1047	1044	1041	1036	1030	1027	1025	1026	1030	1034	1045	1051	1054	1056	1055	1056	1055	1041	1044	1042
19	1045	1048	1045	1048	1048	1048	1045	1044	1040	1037	1034	1031	1036	1043	1048	1048	1051	1056	1060	1060	1057	1055	1054	1051	1047
20	1050	1049	1049	1050	1053	1054	1051	1045	1035	1029	1022	1019	1024	1030	1030	1033	1042	1053	1057	1055	1055	1044	1046	1043
21	1047	1047	1020	1025	1041	1044	1044	1044	1044	1042	1036	1034	1035	1041	1048	1056	1060	1062	1060	1057	1056	1054	1053	1050	1046
22	1048	1048	1048	1050	1052	1050	1050	1052	1042	1041	1036	1030	1030	1037	1044	1049	1063	1077	1094	1096	1074	1065	1061	1051	1054
23	1038	1031	1044	1050	1055	1056	1055	1054	1051	1048	1041	1033	1033	1038	1045	1051	1055	1056	1060	1061	1060	1063	1060	1057	1050
24	1053	1051	1050	1054	1051	1047	1049	1050	1049	1044	1042	1041	1037	1041	1044	1054	1057	1059	1061	1062	1062	1059	1054	1042	1051
25	1027	1039	1047	1050	1050	1053	1053	1050	1043	1036	1032	1032	1030	1033	1042	1048	1049	1049	1050	1051	1052	1054	1053	1050	1045
26 q	1050	1050	1051	1053	1055	1056	1054	1050	1045	1038	1030	1027	1027	1035	1041	1050	1054	1055	1057	1055	1054	1053	1050	1050	1047
27 d	1049	1049	1050	1050	1051	1052	1048	1042	1038	1026	1021	1024	1019	1024	1042	1052	1072	1095	1090	1077	1059	1042	1030	1018	1047
28 d	1027	1038	1047	1050	1045	1036	1024	1028	1041	1041	1036	1035	1036	1044	1053	1066	1069	1070	1068	1067	1063	1054	1053	1039	1047
29	1044	1047	1048	1051	1052	1051	1051	1049	1048	1039	1038	1033	1036	1041	1047	1053	1056	1060	1059	1059	1056	1056	1055	1054	1049
30	1052	1044	1027	1035	1044	1048	1048	1044	1042	1036	1032	1030	1035	1041	1047	1057	1060	1056	1057	1056	1059	1055	1052	1051	1046
31 q	1050	1051	1053	1054	1055	1054	1053	1051	1051	1045	1042	1042	1041	1044	1048	1055	1058	1059	1060	1057	1054	1054	1052	1051	1051
Mean	1047	1044	1044	1046	1047	1047	1046	1044	1042	1039	1035	*1033*	1034	1039	1045	1052	1057	1061	*1063*	1062	1060	1056	1052	1049	1048

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

121 ESKDALEMUIR — MAY 1942

	TERRESTRIAL MAGNETIC ELEMENTS																3-hr. range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination				Vertical force										
	Maximum 16,000γ +		Minimum 16,000γ +		Range	Maximum 12° +		Minimum 12° +		Range	Maximum 44,000γ +		Minimum 44,000γ +		Range					
	h. m.	γ	γ	h. m.	γ	h. m.	′	′	h. m.	′	h. m.	γ	γ	h. m.	γ					°A.
1	2 11) 2 21)	552	470	11 53	82	14 0	47·7	31·4	4 58	16·3	16 41	1065	1007	8 10	58	3,3,3,2,3,2,1,1	18	1	83·2
2	16 17	563	459	10 29	104	14 42	52·1	35·0	23 41	17·1	16 40	1100	1039	9 55	61	1,2,2,2,3,3,2,3	18	1	83·1
3	23 1	552	489	9 57	63	13 51	45·8	35·4	8 12	10·4	20 10	1061	1038	0 15	23	3,2,2,2,1,1,1,2	14	1	83·1
4 d	18 38	602	455	22 19	147	16 21	*54·1*	24·4	24 0	29·7	20 13	*1103*	1031	11 50	72	2,1,2,1,3,4,4,3	20	1	83·3
5 d	1 4	602	*447*	1 31	155	13 32	48·3	*12·6*	1 44	*35·7*	20 0	1066	*920*	1 30	*146*	5,3,3,2,2,2,1,4	22	1	83·3
6	19 9	556	496	12 23	60	14 48	46·7	30·6	0 22	16·1	17 31	1062	1034	1 41	28	2,3,2,2,2,3,2,1	17	0	83·3
7	17 28	554	499	11 57	55	12 3	44·1	37·0	8 33	*7·1*	19 52	1057	1033	12 6	24	1,2,2,2,2,2,2,1	14	0	83·3
8	20 32	565	505	11 23	60	13 40	47·9	36·3	7 20	11·6	18 12	1056	1033	10 32	23	1,2,1,1,2,2,2,2	13	0	83·4
9 q	18 13	551	499	11 43	*52*	13 50	45·1	34·3	8 13	10·8	20 9	1056	1031	11 23	25	1,1,2,3,1,1,1,2	12	0	83·4
10	23 39	586	510	14 59	76	13 43	47·3	36·0	6 1	11·3	1 32	1051	1024	12 43	27	1,1,2,1,3,2,3,3	16	0	83·3
11	0 13	587	513	10 46	74	12 48	46·3	34·5	0 26	11·8	19 0	1056	1024	11 58	32	3,1,2,1,2,2,1,1	13	0	83·3
12 q	16 27	559	497	11 12	62	12 28	45·9	35·0	8 4	10·9	18 24	1069	1020	12 13	49	0,0,1,2,2,2,2,1	10	0	83·2
13 q	23 40	559	497	11 6	62	13 24	46·9	36·1	5 22	10·8	5 13	1057	1030	11 27	27	1,1,1,1,1,2,1,2	10	0	83·1
14 d	3 38	585	482	9 10	103	13 38	47·8	31·5	5 26	16·3	16 20	1066	1018	7 27	48	2,4,4,3,3,3,2,1	22	1	83·0
15	18 42	558	489	11 22	69	14 8	49·6	34·1	20 31	15·5	20 30	1072	1037	6 15	35	1,2,1,2,2,2,3,2	15	0	83·0
16	19 5	570	496	12 31	74	16 0	45·8	33·5	8 4	12·3	19 34	1074	1028	11 9	46	1,2,1,2,2,3,3,2	16	1	82·9
17	19 35	563	501	10 5	62	14 9	47·6	34·9	8 11	12·7	19 5	1071	1031	10 42	40	2,1,1,2,1,3,2,1	13	0	82·8
18	17 33	565	489	10 40	76	13 56	48·4	35·2	4 36	13·2	21 10	1060	1024	11 20	36	2,1,1,2,2,2,2,3	15	0	82·8
19	17 25	567	500	12 19	67	13 27	47·5	36·0	6 9	11·5	18 20	1062	1030	11 33	32	1,1,1,1,1,2,1,1	9	0	82·8
20	17 33	596	504	12 30	92	16 11	50·9	32·5	7 8	18·4	18 4	1060	1018	11 35	42	0,1,2,2,3,4,3,3	18	1	82·7
21	18 24	567	489	11 35	78	2 13	48·8	35·1	8 34	13·7	17 5	1066	1010	2 47	56	3,2,2,2,3,3,3,2	20	1	82·7
22	17 31	583	466	7 58	117	17 33	48·6	31·5	6 25	17·1	19 10	1101	1027	12 13	74	2,2,3,2,2,3,4,3	21	1	82·6
23	17 37) 17 52)	579	497	10 35	82	0 49	46·9	33·4	7 42	13·5	21 42	1066	1030	1 5	36	3,2,2,2,2,3,2,2	18	1	82·6
24	17 58	566	492	10 23	74	14 13	46·6	31·9	7 43	14·7	20 16	1063	1031	24 0	32	1,2,2,1,2,3,2,2	15	0	82·6
25	18 36	562	508	10 22	54	13 43	45·7	35·5	6 52	10·2	20 50	1054	995	0 20	59	2,1,2,2,3,1,2,0	13	0	82·5
26 q	18 26	558	500	8 59	58	13 9	46·8	34·4	7 38	12·4	18 20	1059	1025	11 50	34	0,0,0,2,2,2,1,1	8	0	82·5
27 d	19 4	*648*	482	11 14	*166*	13 32	53·2	25·0	19 1	28·2	17 42	1101	1013	23 9	88	0,1,1,4,3,4,5,4	22	1	82·5
28 d	20 29	560	465	6 51	95	12 50	49·3	35·2	22 52	14·1	17 10	1071	1024	6 40	47	2,4,3,2,3,3,2,3	22	1	82·5
29	17 53	563	490	12 18	73	12 28	45·5	34·8	7 15	10·7	17 19	1060	1032	11 28	28	2,2,1,2,2,2,2,1	14	0	82·5
30	18 40	553	493	9 27	60	13 22	45·1	33·1	6 0	12·0	20 25	1061	1025	2 32	36	3,1,1,2,2,1,2,1	13	0	82·5
31 q	17 57	555	500	8 23	55	13 36	48·3	35·0	7 38	13·3	18 30	1061	1040	12 28	*21*	1,1,1,1,2,2,1,1	10	0	82·5
Mean		571	490		81		47·8	32·9		14·8		1067	1023		45	1·9	15·5	0·42	82·9

q denotes an international quiet day and d an international disturbed day.

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

122 ESKDALEMUIR (H) — 16,000γ (0·16 C.G.S. unit) + — JUNE 1942

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	540	535	534	533	537	535	532	527	523	513	503	505	514	520	533	539	549	543	551	556	558	552	551	547	535
2 q	543	544	543	543	543	539	532	523	519	512	509	513	523	525	530	539	547	555	559	558	551	546	543	543	537
3	543	543	542	544	547	544	539	529	515	508	515	524	523	539	528	555	547	568	567	563	546	550	532	527	539
4	528	532	527	532	531	527	519	512	509	509	505	511	527	536	539	546	555	557	558	548	547	547	543	541	533
5	540	532	527	544	543	543	538	518	500	495	497	500	511	523	539	551	551	551	555	558	558	555	552	548	535
6	547	543	534	528	534	535	529	531	531	525	506	504	504	512	524	536	542	547	547	547	544	546	546	548	533
7 q	547	544	539	532	528	530	535	531	527	527	528	524	519	520	523	536	539	542	546	548	548	547	546	540	535
8	542	538	539	544	540	535	531	527	523	523	517	525	527	516	528	546	558	554	552	550	544	543	541	540	537
9 q	542	541	539	539	539	536	527	523	519	511	514	515	521	528	538	543	550	547	548	547	547	544	544	546	535
10 q	544	542	543	543	540	532	526	520	519	521	520	520	524	528	542	554	553	551	551	555	558	558	555	556	540
11 d	566	560	560	559	552	548	537	535	543	535	516	509	513	527	539	547	590	574	582	563	535	523	528	534	*545*
12	512	514	507	512	505	505	509	512	496	492	485	512	511	527	525	539	546	555	551	543	545	536	541	535	521
13 d	528	526	535	527	527	520	516	503	493	493	501	527	533	536	535	558	570	547	575	571	539	529	546	532	532
14	528	528	530	519	505	507	504	519	512	492	488	494	495	493	516	528	544	558	539	557	540	539	527	532	*521*
15	532	532	528	530	524	522	505	501	497	503	501	499	504	511	520	527	536	543	552	549	546	544	539	533	524
16	538	534	530	533	532	532	533	524	515	504	501	500	510	523	520	540	543	553	543	548	548	543	547	543	531
17	548	547	545	544	537	544	536	521	511	502	500	505	500	523	516	544	543	545	559	566	562	553	550	548	535
18	551	550	527	546	539	535	526	519	510	497	499	508	516	532	535	544	546	551	551	551	548	544	544	543	534
19 d	544	548	537	539	542	540	530	525	519	516	516	521	539	546	527	585	622	618	563	543	542	520	528	528	543
20	535	532	538	532	536	539	527	511	496	495	498	493	493	499	523	527	536	553	543	543	546	533	532	535	525
21	539	538	536	535	524	519	532	524	516	508	503	511	519	528	536	543	544	548	550	547	544	541	537	536	532
22 q	535	535	535	536	539	540	539	529	520	511	509	512	516	528	534	543	545	544	550	550	547	551	553	548	535
23	546	544	544	546	547	544	542	535	537	529	523	515	516	521	532	546	559	571	555	548	550	545	544	538	541
24	543	539	539	532	527	520	520	524	521	519	516	512	515	518	523	525	543	544	551	550	550	548	550	564	533
25	544	535	532	539	536	534	516	511	511	509	506	505	509	523	534	536	534	550	552	555	552	540	532	531	530
26	533	538	539	535	530	534	524	520	519	516	516	514	523	528	534	538	544	551	555	547	550	539	539	536	533
27	531	528	527	532	529	532	523	515	509	512	513	516	523	519	535	536	543	555	558	555	550	547	543	543	532
28	543	544	543	543	541	539	536	521	500	512	517	514	525	539	564	543	553	574	567	558	555	552	546	527	540
29 d	546	528	528	525	527	527	516	507	505	497	500	505	512	535	547	562	573	571	572	551	557	554	546	535	534
30 d	550	532	531	515	511	539	531	521	499	485	486	495	503	531	534	539	551	552	551	551	537	537	546	543	528
Mean	540	537	535	535	533	533	527	521	514	509	*507*	510	516	525	532	543	552	*556*	555	553	548	543	542	540	534

MAGNETIC DECLINATION (WEST)

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

123 ESKDALEMUIR (D) — 12° + — JUNE 1942

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	41·9	39·6	38·7	37·0	35·3	33·7	33·7	34·4	34·3	36·2	39·9	43·4	45·9	46·2	46·1	45·1	44·9	43·4	42·7	42·5	40·1	40·1	40·5	39·9	40·2
2 q	39·5	39·5	38·9	38·6	37·3	35·5	35·2	35·0	35·0	37·6	40·0	42·5	44·3	46·0	46·8	46·7	45·9	45·0	43·9	42·5	41·8	41·3	40·5	39·9	40·8
3	40·0	39·9	38·5	38·0	36·7	35·0	34·5	35·2	37·0	39·5	41·8	43·9	46·3	48·5	48·6	50·3	47·6	44·2	44·4	43·2	41·8	39·3	36·6	39·5	41·3
4	40·2	39·7	38·6	38·2	37·3	36·4	36·2	35·9	35·4	36·9	39·1	41·4	43·5	44·9	45·1	43·5	43·1	43·4	43·4	40·5	41·5	41·5	40·7	38·8	40·2
5	38·0	36·8	36·0	36·2	34·4	33·0	33·8	35·0	36·2	37·9	40·0	42·6	44·3	45·9	46·4	46·0	45·6	45·1	44·0	43·3	42·3	42·0	41·5	40·6	40·3
6	40·6	39·0	37·5	38·3	37·5	37·2	37·1	36·3	36·6	39·6	41·5	44·0	44·9	45·9	46·7	44·5	43·1	41·7	42·3	42·2	41·3	40·8	40·6	40·0	40·8
7 q	38·9	38·3	37·7	37·6	37·1	36·8	37·7	36·6	35·9	36·7	39·1	41·8	43·2	43·2	43·2	42·6	42·3	41·6	41·3	40·7	40·6	41·2	40·5	39·8	39·8
8	39·5	39·4	42·1	38·3	36·6	34·9	34·7	35·1	36·1	38·9	42·3	44·4	45·8	45·7	44·9	43·4	42·4	40·9	41·2	41·3	40·5	40·6	40·5	39·8	40·4
9 q	39·7	39·6	38·9	37·9	36·6	35·1	34·6	35·9	37·3	39·7	41·6	44·7	45·6	45·6	45·0	43·9	43·1	43·2	42·4	42·7	42·4	41·4	40·6	40·7	40·8
10 q	39·8	39·7	39·5	39·5	37·9	36·8	35·5	35·2	35·4	37·8	41·3	45·4	48·5	48·6	47·8	45·9	43·5	42·2	41·4	41·3	41·4	41·9	42·1	41·7	41·3
11 d	40·3	39·6	39·6	37·9	34·6	32·7	30·9	32·6	30·6	34·2	38·9	44·0	48·0	50·6	52·0	51·7	51·2	48·6	44·0	38·5	33·3	38·0	35·9	32·5	40·0
12	35·4	37·9	33·4	35·1	36·5	36·9	36·0	37·1	35·9	37·9	42·2	43·4	45·7	48·5	48·9	47·4	44·7	42·4	42·5	42·1	41·6	40·6	40·5	39·1	40·5
13 d	40·4	43·6	40·5	33·4	34·9	35·2	35·4	36·1	37·8	38·0	41·4	43·5	44·3	45·2	45·8	45·9	43·2	42·3	44·5	41·4	35·9	39·7	42·0	37·1	40·3
14	32·7	36·7	34·4	35·1	35·2	37·3	37·8	36·8	36·1	37·8	40·9	43·6	46·0	44·5	44·2	45·1	42·4	42·3	41·5	38·4	40·0	40·3	39·0	40·4	39·5
15	39·9	40·9	40·6	40·0	36·1	33·8	32·4	33·4	33·3	34·5	37·9	41·5	44·1	44·2	44·8	44·3	43·1	41·6	40·4	39·6	39·9	39·7	39·6	39·6	39·4
16	41·0	40·6	38·7	37·1	36·8	35·8	34·9	33·6	34·3	36·3	40·5	43·6	45·8	46·2	46·3	45·2	44·0	43·5	43·1	39·1	39·2	40·5	40·5	39·7	40·3
17	40·4	39·8	39·5	38·8	36·8	35·5	34·4	34·5	37·0	39·9	43·4	43·2	46·0	45·9	44·3	43·9	43·6	42·8	43·1	42·5	41·5	41·7	41·2	41·2	40·9
18	42·5	40·3	34·0	33·7	33·7	34·4	35·3	35·7	35·4	38·6	40·4	42·0	43·4	44·4	45·0	44·9	44·0	43·6	43·0	42·3	41·7	41·3	40·7	40·0	40·0
19 d	41·2	39·5	36·9	36·2	34·5	33·2	32·3	33·5	34·4	34·9	37·3	41·4	45·7	46·8	49·2	50·7	47·1	41·3	42·7	42·6	42·3	38·0	37·6	38·8	39·9
20	39·2	37·9	39·7	39·4	39·0	36·8	34·8	34·1	36·1	37·6	38·9	41·5	44·0	44·2	44·0	44·3	43·1	42·5	42·3	41·7	40·1	40·0	39·9	40·0	40·0
21	39·5	40·4	36·2	35·9	37·9	40·6	37·6	35·5	35·4	36·1	38·1	39·9	42·6	44·4	44·8	44·3	44·3	44·0	42·7	41·5	41·3	41·3	41·4	40·1	40·2
22 q	39·4	38·3	37·8	37·7	35·5	34·4	34·4	35·0	35·4	35·8	37·8	40·3	42·0	43·2	43·5	43·9	43·5	43·5	43·3	43·0	41·4	40·6	40·8	39·1	39·6
23	38·9	37·9	37·1	36·1	34·7	33·3	33·5	34·4	33·3	34·5	36·9	39·4	40·8	42·4	43·5	45·1	46·7	47·8	46·5	44·0	41·7	40·6	40·4	40·4	39·6
24	39·5	34·2	32·6	30·2	34·1	33·5	33·7	34·7	37·6	37·9	40·1	43·4	44·9	46·1	47·3	45·7	44·4	43·1	42·2	42·3	41·5	40·6	40·3	37·8	39·5
25	32·7	30·5	30·1	32·3	30·6	30·5	32·5	32·7	34·1	36·7	39·5	41·7	43·9	45·1	45·1	44·0	42·4	42·3	42·1	41·2	40·1	40·3	39·8	39·0	*37·9*
26	39·0	39·0	39·0	37·7	38·3	35·2	33·4	33·6	34·3	36·2	39·2	42·9	47·1	48·7	47·9	45·7	43·7	42·4	40·9	40·7	39·0	36·2	38·9	39·8	39·9
27	39·1	37·8	36·0	35·9	36·8	35·4	33·4	33·6	35·3	37·3	39·6	41·3	43·9	45·1	44·9	44·0	42·3	42·2	41·5	41·4	40·8	40·5	39·6	44·0	39·7
28	39·5	39·4	39·5	38·9	37·8	36·7	35·7	36·1	38·7	39·8	41·2	43·5	46·7	48·5	49·9	48·6	48·1	44·4	44·7	43·0	42·7	41·1	40·0	36·9	*41·7*
29 d	40·5	32·6	31·3	32·7	32·5	34·3	32·5	34·7	35·3	37·9	40·9	45·3	48·5	49·4	48·7	48·5	47·8	47·2	43·1	43·3	42·2	41·4	40·3	37·7	40·4
30 d	39·5	35·9	33·3	30·8	39·8	41·6	37·6	35·6	33·7	36·6	39·7	42·5	44·2	45·7	47·0	46·2	44·2	44·8	42·6	39·7	41·3	40·5	37·9	36·7	39·9
Mean	39·3	38·5	37·2	36·5	36·1	35·4	*34·7*	34·9	35·4	37·3	40·1	42·7	45·0	46·0	*46·3*	45·7	44·5	43·4	42·8	41·6	40·7	40·4	40·0	39·3	40·2

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

124 ESKDALEMUIR (V) — 44,000γ (0·44 C.G.S. unit) + — JUNE 1942

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	1045	1045	1048	1053	1054	1053	1048	1045	1039	1035	1028	1025	1026	1030	1035	1041	1047	1051	1050	1051	1051	1050	1049	1049	1044
2 q	1050	1050	1050	1050	1051	1053	1050	1051	1048	1037	1034	1033	1037	1044	1044	1042	1044	1053	1054	1055	1054	1051	1048	1048	1047
3	1048	1048	1050	1054	1054	1050	1045	1041	1039	1029	1021	1021	1029	1036	1042	1050	1062	1075	1074	1069	1066	1060	1054	1051	1049
4	1047	1041	1047	1051	1054	1054	1054	1049	1048	1043	1038	1032	1030	1030	1038	1042	1045	1051	1055	1060	1056	1050	1050	1048	1046
5	1039	1036	1040	1042	1045	1048	1044	1043	1038	1032	1031	1032	1036	1037	1042	1049	1056	1060	1057	1053	1048	1049	1048	1048	1044
6	1044	1043	1046	1051	1052	1052	1048	1044	1041	1031	1027	1029	1035	1041	1044	1047	1053	1051	1053	1055	1054	1050	1049	1047	1045
7 q	1044	1043	1047	1049	1049	1045	1038	1039	1039	1033	1035	1036	1039	1044	1047	1048	1049	1048	1048	1050	1050	1049	1048	1048	1044
8	1047	1045	1039	1042	1045	1045	1042	1041	1038	1042	1036	1033	1036	1042	1045	1046	1049	1049	1050	1050	1048	1048	1048	1048	1044
9 q	1048	1048	1048	1048	1048	1048	1047	1041	1038	1036	1029	1029	1029	1035	1041	1045	1047	1048	1049	1048	1048	1048	1048	1049	1043
10 q	1049	1049	1049	1050	1053	1054	1054	1053	1045	1035	1033	1033	1036	1042	1042	1045	1050	1054	1054	1048	1047	1047	1047	1045	1046
11 d	1045	1044	1044	1042	1042	1041	1040	1034	1028	1029	1021	1018	1015	1028	1041	1054	1084	1101	1106	1108	1090	1065	1053	1045	1051
12	1030	1010	1027	1041	1048	1049	1045	1043	1048	1045	1035	1033	1038	1050	1056	1059	1078	1085	1080	1071	1062	1059	1053	1048	1050
13 d	1050	1044	1026	1031	1042	1045	1047	1050	1048	1048	1036	1027	1024	1032	1042	1049	1066	1073	1067	1069	1068	1059	1036	1021	1046
14	1025	1026	1023	1030	1037	1039	1038	1038	1044	1042	1038	1033	1033	1045	1054	1059	1066	1071	1070	1068	1065	1059	1057	1054	1046
15	1053	1049	1042	1039	1042	1048	1053	1050	1047	1045	1042	1044	1045	1048	1049	1051	1050	1054	1055	1060	1060	1059	1056	1054	1050
16	1050	1045	1047	1048	1048	1050	1051	1053	1049	1048	1044	1039	1041	1043	1045	1045	1051	1056	1056	1063	1063	1059	1055	1054	1050
17	1050	1051	1053	1054	1053	1049	1049	1043	1043	1041	1042	1044	1048	1054	1056	1060	1068	1070	1067	1065	1062	1057	1055	1054	1054
18	1048	1024	1029	1036	1042	1047	1050	1049	1049	1048	1048	1045	1043	1043	1045	1050	1054	1054	1055	1054	1054	1053	1052	1051	1047
19 d	1050	1042	1047	1050	1054	1054	1051	1048	1041	1038	1035	1029	1030	1045	1060	1065	1090	1101	1110	1102	1087	1072	1059	1050	*1059*
20	1053	1055	1051	1044	1032	1033	1042	1047	1045	1043	1047	1054	1054	1054	1060	1066	1071	1068	1070	1071	1067	1065	1060	1059	1055
21	1055	1050	1044	1042	1041	1042	1043	1050	1051	1048	1048	1044	1045	1048	1051	1059	1062	1062	1060	1060	1058	1057	1056	1054	1051
22 q	1054	1054	1054	1055	1055	1053	1051	1051	1050	1051	1047	1042	1040	1041	1044	1047	1051	1054	1056	1056	1055	1055	1054	1054	1051
23	1051	1051	1051	1053	1052	1050	1048	1046	1039	1033	1037	1036	1033	1032	1034	1039	1048	1058	1077	1075	1072	1065	1060	1057	1050
24	1042	1014	1006	1014	1026	1036	1038	1037	1037	1041	1039	1033	1036	1044	1050	1057	1061	1061	1060	1059	1056	1053	1051	1036	1041
25	1029	1021	1012	1006	1014	1021	1026	1030	1035	1038	1040	1041	1043	1044	1044	1044	1053	1060	1061	1062	1062	1060	1057	1055	*1040*
26	1054	1054	1051	1050	1049	1044	1043	1043	1043	1042	1038	1036	1036	1039	1045	1048	1054	1060	1065	1060	1056	1055	1051	1051	1049
27	1053	1053	1054	1053	1051	1048	1045	1042	1042	1039	1042	1041	1037	1037	1038	1047	1051	1052	1051	1051	1052	1054	1053	1052	1047
28	1050	1049	1048	1049	1048	1044	1045	1050	1051	1039	1033	1027	1033	1043	1053	1068	1085	1087	1080	1077	1067	1062	1057	1053	1054
29 d	1041	1024	1018	1024	1032	1039	1039	1040	1039	1039	1042	1041	1041	1047	1047	1048	1050	1059	1078	1080	1072	1064	1059	1058	1047
30 d	1043	1027	1023	1025	1021	996	1011	1023	1035	1037	1033	1027	1030	1041	1053	1067	1073	1072	1073	1069	1060	1056	1053	1041	1041
Mean	1046	1041	1041	1043	1045	1044	1044	1044	1043	1040	1037	*1035*	1036	1041	1046	1051	1059	1063	*1065*	1064	1060	1056	1053	1049	1048

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

125 ESKDALEMUIR — JUNE 1942

	TERRESTRIAL MAGNETIC ELEMENTS												3-hr. range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination			Vertical force							
	Maximum 16,000γ +		Minimum 16,000γ +		Range	Maximum 12° +	Minimum 12° +	Range	Maximum 44,000γ +		Minimum 44,000γ +		Range			
	h. m.	γ	γ	h. m.	γ	h. m.	′	′ h. m.	′	h. m.	γ	γ	h. m.	γ					°A.
1	18 48	567	497	10 51	70	13 30	46·7	32·4 5 48	14·3	4 40	1055	1024	12 23	31	2,1,1,1,2,2,2,0	11	0	82·5
2 q	18 5	562	504	10 28	58	14 27	47·3	34·4 7 44	12·9	19 30	1056	1032	11 41	24	0,0,0,1,2,1,1,1	6	0	82·5
3	15 50	583	492	12 59	91	15 45	51·3	34·3 5 48	17·0	18 21	1077	1019	11 20	58	1,0,2,3,4,3,3,3	19	1	82·5
4	18 41	563	502	10 43	61	14 20	45·8	34·6 8 5	11·2	19 31	1060	1030	12 0	30	2,1,1,1,2,2,2,2	13	0	82·5
5	16 3	585	492	9 27	93	16 6	47·9	31·7 5 35	16·2	17 51	1060	1030	10 20	30	3,1,2,1,3,3,1,1	15	0	82·4
6	23 30	554	496	11 15	58	14 10	46·8	35·9 7 47	10·9	19 15	1056	1026	11 3	30	2,2,2,2,2,2,0,2	14	0	82·4
7 q	21 2	553	515	13 38	*38*	13 57	43·4	35·4 8 0	*8·0*	20 39	1051	1032	10 0	19	1,2,2,1,2,1,1,1	11	0	82·4
8	16 15	566	502	13 18	64	12 19	46·0	34·2 6 23	11·8	16 30	1051	1033	11 40	*18*	2,2,2,1,3,2,2,1	15	0	82·4
9 q	16 20	552	508	9 39	44	13 2	45·8	32·6 6 32	13·2	5 20	1051	1026	12 3	25	1,0,2,1,1,1,0,1	7	0	82·4
10 q	19 47	563	516	8 11) 11 13)	47	13 9	48·7	35·0 7 59	13·7	17 53	1056	1032	10 0	24	1,2,1,1,1,2,2,1	11	0	82·4
11 d	16 14	634	*472*	13 32	*162*	16 11	*53·9*	*28·0* 8 19	*25·9*	19 49	*1115*	1012	12 11	*103*	2,2,3,3,4,5,4,3	26	1	82·4
12	17 53	576	476	10 22	100	14 5	50·0	31·5 1 56	18·5	17 17	1090	1007	1 20	83	3,2,2,3,3,3,3,2	21	1	82·4
13 d	16 0	601	485	10 17	116	16 1	47·7	32·3 3 36	15·4	17 20	1075	1018	23 10	57	3,2,2,3,3,4,4,3	24	1	82·4
14	19 31	575	473	13 3	102	12 30	46·9	31·1 0 34	15·8	17 23	1072	1019	2 2	53	3,3,3,2,3,3,3,2	22	1	82·5
15	18 22	555	494	11 14	61	14 41	45·0	31·5 6 12	13·5	19 41	1062	1036	3 40	26	2,2,2,1,1,2,1,1	12	0	82·4
16	18 3	582	492	18 51	90	14 0	46·9	33·4 7 18	13·5	19 56	1067	1038	11 32	29	2,1,0,2,2,3,4,1	15	1	82·4
17	19 3	582	492	12 52	90	12 38	46·8	33·7 7 10	13·1	17 31	1072	1038	9 46	34	1,2,2,2,3,3,2,2	17	1	82·6
18	1 5	570	485	9 19	85	0 53	46·8	32·2 4 4	14·6	18 4	1056	1019	1 35	37	3,2,2,3,2,2,1,1	16	1	82·6
19 d	17 5	*649*	496	14 50	153	15 15	52·1	31·3 6 35	20·8	18 32	1113	1026	11 52	87	2,1,1,3,4,4,3,3	21	1	82·5
20	17 20	577	480	12 42	97	15 24	45·0	33·4 7 4	11·6	16 39	1072	1029	5 12	43	2,3,2,2,3,3,2,2	19	1	82·6
21	18 12	552	497	10 13	55	13 12	45·0	35·1 3 36	9·9	16 51	1062	1037	4 30	25	2,3,2,2,2,2,1,0	14	0	82·6
22 q	22 43	556	504	10 2	52	15 33	44·0	34·2 5 31	9·8	19 43	1057	1038	12 22	19	0,1,1,1,2,2,1,1	9	0	82·6
23	17 30	582	504	11 4	78	17 57	48·6	32·1 5 59	16·5	18 51	1079	1030	14 22	49	1,1,2,2,3,3,2,2	16	1	82·6
24	23 29	578	500	8 51	78	14 13	48·1	29·1 3 27	19·0	16 41	1062	1003	2 29	59	3,3,2,2,3,3,2,3	21	1	82·7
25	20 2	566	497	10 50	69	13 51	45·8	*28·0* 2 0	17·8	19 54	1065	1006	2 38	59	2,2,2,1,2,2,2,2	15	0	82·8
26	18 32	566	508	8 47	58	13 47	49·3	32·5 6 19	16·8	18 20	1067	1035	12 19	32	2,2,2,2,2,3,2,1	16	0	82·9
27	18 18	562	507	8 38	55	13 47	45·3	32·6 7 3	12·7	2 50	1055	1036	12 50	19	2,2,1,2,2,2,2,1	14	0	83·1
28	14 45	601	496	8 12	105	14 47	52·2	34·3 6 10	17·9	17 25	1090	1027	11 23	63	1,1,2,2,4,3,3,3	19	1	83·2
29 d	17 25	596	493	9 3	103	13 40	50·6	*28·0* 2 52	22·6	19 10	1086	1015	2 24	71	3,3,2,2,3,3,3,3	22	1	83·4
30 d	22 57	578	477	10 59	101	15 19	48·5	29·5 3 13	19·0	19 18	1075	*994*	5 20	81	3,4,3,2,3,3,3,3	24	1	83·6
Mean	- -	576	495	- -	81	- -	47·6	32·5 - -	15·1	- -	1069	1025	- -	44	2·0	16·2	0·50	82·6

q denotes an international quiet day and d an international disturbed day.

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

126 ESKDALEMUIR (H) — 16,000γ (0·16 C.G.S. unit) + — JULY 1942

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	535	520	526	529	540	519	496	508	501	484	467	492	499	510	516	535	550	565	558	549	549	538	528	527	523
2 q	527	527	527	529	530	527	526	516	507	500	497	503	512	512	527	535	531	538	549	552	553	549	535	533	527
3 q	532	530	531	537	537	531	524	517	512	507	503	506	506	515	534	534	542	542	549	546	546	539	538	538	529
4 q	537	534	532	531	531	531	530	526	520	508	500	498	504	510	517	530	516	545	547	547	545	539	539	536	527
5 q	535	538	542	545	545	545	538	531	521	511	511	523	511	516	512	536	549	554	562	566	562	550	548	543	*537*
6	538	534	536	539	538	534	534	526	515	511	515	512	515	524	532	554	562	546	550	554	551	545	538	539	535
7	530	531	531	530	530	526	516	515	514	504	500	504	520	518	534	533	531	547	553	558	554	554	543	536	530
8 d	529	551	546	531	546	519	518	530	489	472	472	480	529	491	512	522	533	546	561	550	549	531	533	527	524
9	523	534	499	522	520	522	515	512	503	495	493	500	510	523	524	534	553	570	544	541	546	539	531	524	524
10	523	519	523	514	512	511	510	511	508	506	508	511	513	509	519	533	538	543	545	543	549	529	537	565	524
11 d	543	542	515	542	549	510	456	500	452	480	486	483	500	522	554	561	526	514	537	544	547	530	529	531	519
12	531	524	526	513	507	508	501	499	499	491	457	485	511	528	522	519	523	527	538	550	536	536	530	527	*516*
13	547	524	520	523	534	519	504	501	501	504	499	498	506	515	518	534	519	542	543	543	538	531	529	524	521
14	523	527	527	531	533	524	523	522	515	506	511	504	508	510	526	521	529	553	559	561	546	547	545	527	528
15 d	528	534	532	531	519	529	526	512	483	486	516	510	504	492	507	536	576	596	569	573	538	535	527	523	528
16	527	526	519	522	512	519	515	511	495	483	490	502	506	503	517	533	534	542	542	549	543	539	530	527	520
17	523	518	531	533	525	507	519	508	500	503	506	492	504	505	518	523	533	542	558	546	543	535	534	533	522
18	531	527	526	526	527	526	521	508	500	506	500	498	512	517	526	533	534	544	547	550	545	540	536	536	526
19 q	535	534	524	530	531	530	523	518	515	504	492	485	494	511	518	535	543	550	547	547	544	547	546	546	527
20 d	538	534	535	538	539	544	527	542	543	519	499	504	496	533	516	528	545	550	554	555	549	538	514	530	532
21	506	492	533	527	519	521	521	511	492	486	491	503	515	520	527	529	527	543	547	545	543	536	531	534	521
22	526	524	526	524	527	526	520	512	511	510	495	504	499	523	530	534	545	546	542	539	545	539	546	539	526
23	538	529	527	530	527	526	519	517	519	511	511	518	520	531	526	545	537	563	562	547	538	531	537	539	531
24	531	545	533	524	538	537	523	526	524	515	511	513	511	517	524	535	530	547	561	565	538	531	523	519	530
25	515	520	522	533	538	539	515	518	507	498	491	483	498	495	495	514	517	543	554	547	532	531	544	550	521
26	522	522	522	521	518	514	516	519	516	514	511	511	508	507	522	529	536	547	554	562	563	534	529	522	526
27 d	513	532	516	514	499	523	508	503	503	479	481	503	485	519	537	551	538	534	558	551	552	536	534	529	521
28	534	513	511	511	504	484	507	512	504	495	495	504	503	519	522	527	545	523	537	565	560	538	535	526	520
29	523	523	528	519	526	514	506	503	494	494	494	498	505	511	517	526	531	526	531	539	535	530	534	537	519
30	543	522	519	519	526	524	515	507	488	485	511	511	526	503	534	535	538	539	547	534	549	539	543	532	525
31	519	519	527	530	529	529	526	517	502	485	484	483	484	499	519	530	543	548	540	536	538	542	535	540	521
Mean	529	527	526	527	528	523	516	515	505	499	*497*	501	507	513	523	533	537	546	550	*550*	546	538	535	533	525

MAGNETIC DECLINATION (WEST)

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

127 ESKDALEMUIR (D) — 12° — JULY 1942

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	37·2	35·7	37·1	37·6	38·1	39·4	43·4	45·5	41·0	37·3	38·8	42·3	43·2	45·9	46·1	45·1	43·8	44·4	43·0	40·7	40·8	39·3	39·6	39·0	41·0
2 q	37·9	37·9	37·6	37·7	38·0	36·8	35·9	34·4	35·2	35·5	37·1	39·7	43·1	44·1	44·1	44·0	43·0	43·2	43·1	41·5	38·5	38·6	37·9	39·0	39·3
3 q	38·6	38·0	39·5	37·6	36·3	35·5	36·3	37·1	36·3	37·0	39·0	40·4	42·4	45·3	46·3	44·9	43·4	42·2	41·4	40·7	40·5	39·7	39·5	39·5	39·9
4 q	39·6	38·9	39·0	37·9	37·1	36·0	35·8	36·0	35·3	36·9	39·0	41·1	42·4	43·1	43·2	42·4	42·1	40·7	39·9	39·7	40·2	40·0	39·5	39·0	39·4
5 q	38·7	38·5	37·9	37·7	36·2	35·1	34·7	35·1	36·1	39·1	40·7	43·8	45·9	47·4	46·6	44·7	44·3	44·2	43·2	42·5	42·2	39·8	41·0	41·2	40·7
6	40·5	37·0	36·4	36·2	35·2	34·9	34·7	35·0	35·9	37·3	38·7	40·8	42·9	44·5	45·0	44·3	43·5	42·1	42·4	42·7	42·3	41·5	41·8	37·8	39·7
7	33·9	35·7	36·2	36·1	35·4	34·5	34·1	35·2	35·5	36·1	39·0	42·3	44·8	46·0	46·0	44·9	43·2	43·2	43·3	43·1	43·1	42·1	39·6	36·2	39·6
8 d	37·9	35·3	30·8	33·3	31·8	29·9	36·3	37·9	37·7	38·1	42·7	44·0	47·8	50·2	49·4	45·3	44·3	43·3	43·1	40·4	38·6	36·4	38·5	40·0	39·7
9	39·4	38·8	36·2	37·2	34·6	34·0	33·9	35·2	35·8	36·2	37·0	39·1	42·5	44·2	44·3	43·1	42·4	39·4	41·4	42·4	42·0	39·8	37·2	36·1	38·8
10	34·9	36·8	37·1	37·2	40·0	37·9	36·8	35·2	36·3	37·7	39·4	41·7	44·2	44·7	44·9	43·7	43·4	42·7	41·1	39·7	40·2	38·0	39·4	40·7	39·7
11 d	38·7	34·4	30·8	37·7	36·2	41·6	47·6	51·3	40·7	43·8	41·5	43·0	48·6	49·7	47·3	46·9	48·0	47·4	46·5	40·8	39·0	38·0	40·9	40·6	*42·5*
12	39·6	37·5	37·3	36·9	37·7	35·3	34·6	35·2	34·9	36·1	40·7	44·9	45·2	46·8	46·7	44·5	43·4	42·6	41·7	41·8	40·6	41·0	39·8	37·5	40·1
13	39·5	33·9	35·5	36·8	35·8	34·7	37·1	37·8	38·9	39·3	41·4	42·7	43·9	44·0	43·2	42·7	41·2	40·1	40·7	40·4	40·2	38·6	38·9	37·9	39·4
14	39·5	39·8	40·6	39·5	37·3	37·9	37·1	35·3	36·8	39·7	39·9	43·1	44·4	45·1	45·9	44·4	42·3	42·1	41·6	41·5	37·0	38·6	40·1	38·4	40·3
15 d	35·5	36·5	36·8	40·3	38·6	39·1	35·9	35·5	36·1	38·6	39·8	42·1	43·0	44·2	43·1	42·1	44·5	35·7	40·4	40·7	36·9	31·5	37·7	40·9	39·0
16	37·2	30·5	35·8	37·6	37·1	37·3	35·3	34·3	35·8	37·1	41·4	43·4	46·2	46·7	46·4	45·4	44·8	42·6	40·3	39·4	38·9	35·9	36·7	35·7	39·2
17	37·6	38·0	35·9	34·5	37·8	41·3	36·2	35·7	35·4	37·7	39·9	39·4	40·6	42·0	42·5	43·1	42·4	40·4	40·5	40·7	40·5	39·9	39·7	39·5	39·2
18	37·9	39·0	38·4	36·9	35·5	34·4	33·6	34·7	36·8	36·9	39·5	41·5	43·2	44·9	45·0	44·9	44·0	42·5	41·2	41·2	41·3	41·3	40·5	39·7	39·8
19 q	39·5	38·3	38·0	37·7	35·8	34·4	33·6	34·1	34·3	34·9	36·9	39·9	43·2	44·6	46·3	45·0	44·5	43·6	42·6	41·6	41·4	41·3	40·3	38·7	39·6
20 d	36·1	37·7	37·1	36·1	34·5	30·8	27·7	33·3	36·1	36·0	38·9	43·8	46·8	48·5	48·4	44·9	43·3	43·2	42·3	42·3	38·1	37·1	38·1	37·0	39·1
21	43·5	40·5	29·9	33·9	32·0	36·7	33·9	34·4	35·3	37·1	39·2	40·5	42·1	44·1	46·0	45·4	43·7	43·2	42·5	41·1	38·2	39·3	36·8	39·3	39·1
22	38·1	39·0	38·0	36·1	34·9	34·4	34·2	34·5	35·1	35·8	38·4	40·3	42·5	42·7	43·2	43·1	42·3	41·4	41·2	40·6	40·4	39·4	38·7	36·8	38·8
23	39·8	35·0	35·6	36·8	35·5	34·4	35·4	37·1	36·7	36·7	38·8	40·7	43·4	45·4	45·2	46·1	45·1	44·0	38·7	41·8	40·5	40·3	39·2	38·6	39·6
24	38·0	37·8	35·6	39·1	41·2	36·9	35·4	34·3	34·6	34·3	35·1	38·9	42·5	44·7	45·0	44·8	42·2	42·4	42·4	34·9	36·7	35·5	35·1	34·1	*38·4*
25	35·1	34·9	38·9	42·6	42·0	38·9	37·6	39·9	38·7	36·8	37·9	42·6	44·9	46·7	43·7	46·6	44·1	42·7	42·2	35·1	34·2	37·2	38·7	38·3	40·0
26	33·5	36·2	37·1	37·2	36·7	36·3	35·5	35·1	35·0	36·3	39·2	42·6	46·1	46·2	45·9	44·5	43·6	43·3	43·2	43·1	42·0	37·9	30·4	29·2	39·0
27 d	27·8	24·4	34·3	38·9	39·3	39·7	35·5	35·5	35·3	37·1	40·9	43·5	44·8	44·9	45·7	45·2	44·4	42·0	36·3	41·0	39·1	39·7	42·4	38·9	39·0
28	35·3	36·0	37·8	37·7	35·2	39·0	38·0	35·4	34·9	36·3	40·2	43·0	45·0	44·9	44·2	43·4	43·4	42·2	40·6	39·5	34·9	36·9	37·7	37·3	39·1
29	44·5	40·0	38·8	37·7	36·0	37·0	37·0	36·0	35·9	37·6	38·5	41·1	43·5	45·2	44·2	43·1	40·7	40·4	40·0	39·5	39·0	39·0	39·0	38·9	39·7
30	39·9	35·4	37·2	40·7	36·1	34·2	34·3	35·7	36·9	37·0	38·6	42·0	45·2	46·7	45·9	44·4	43·3	42·0	38·7	39·1	39·1	38·0	37·2	34·4	39·3
31	36·1	43·1	36·3	35·3	35·3	36·7	35·1	34·1	34·2	34·3	36·4	39·9	43·2	44·0	44·0	43·1	41·6	41·3	40·8	40·4	39·6	40·0	39·7	39·9	38·9
Mean	37·8	36·8	36·6	37·4	36·5	36·6	36·2	*35·7*	36·2	37·1	39·2	41·7	44·1	*45·4*	45·3	44·4	43·4	42·3	41·5	40·6	39·5	38·8	38·8	38·1	39·6

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

128 ESKDALEMUIR (V) — 44,000γ (0·44 C.G.S. unit) + — JULY 1942

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	1041	1043	1044	1048	1047	1048	1047	1039	1039	1040	1046	1045	1044	1048	1057	1062	1068	1066	1068	1069	1065	1061	1059	1057	*1052*
2 q	1047	1047	1047	1047	1046	1045	1046	1047	1045	1032	1026	1026	1030	1033	1034	1040	1050	1050	1051	1052	1054	1046	1045	1044	1043
3 q	1044	1045	1041	1045	1045	1042	1045	1045	1045	1039	1035	1032	1030	1029	1032	1036	1044	1051	1052	1048	1045	1045	1045	1045	1042
4 q	1045	1045	1045	1045	1048	1047	1042	1044	1044	1041	1035	1028	1025	1028	1028	1033	1038	1045	1046	1046	1045	1045	1045	1045	1041
5 q	1045	1044	1044	1045	1046	1046	1042	1040	1041	1029	1024	1025	1027	1028	1033	1034	1041	1045	1047	1048	1049	1050	1046	1045	1040
6	1040	1041	1045	1045	1046	1045	1040	1040	1038	1032	1029	1027	1027	1027	1023	1028	1045	1057	1054	1048	1046	1045	1044	1036	1039
7	1035	1036	1040	1042	1045	1045	1045	1041	1041	1036	1030	1024	1027	1029	1033	1039	1047	1046	1041	1041	1045	1047	1051	1047	1040
8 d	1045	1032	1016	1021	1023	1027	1021	1015	1017	1014	1014	1018	1030	1045	1050	1055	1051	1057	1065	1077	1058	1057	1047	1027	1037
9	1015	1012	1011	1024	1041	1046	1045	1041	1040	1040	1035	1031	1028	1029	1035	1047	1057	1070	1070	1059	1053	1054	1051	1047	1041
10	1039	1041	1042	1044	1039	1039	1041	1046	1046	1040	1028	1021	1027	1029	1032	1036	1047	1051	1047	1051	1048	1051	1047	1040	1041
11 d	1021	993	1024	1032	1033	1035	1010	985	986	992	1005	1027	1046	1065	1126	1183	1149	1107	1083	1089	1075	1060	1064	1058	1052
12	1057	1053	1051	1048	1033	1027	1034	1041	1040	1033	1030	1028	1028	1038	1039	1045	1050	1051	1051	1051	1057	1057	1057	1053	1044
13	1038	1034	1045	1045	1045	1046	1047	1051	1047	1045	1041	1041	1041	1045	1048	1057	1063	1065	1066	1064	1059	1058	1057	1052	1050
14	1051	1051	1045	1041	1045	1047	1043	1039	1033	1034	1036	1037	1030	1039	1050	1056	1069	1065	1063	1059	1063	1054	1045	1025	1047
15 d	1033	1040	1044	1039	1036	1031	1033	1032	1030	1032	1033	1029	1029	1034	1044	1056	1066	1086	1074	1069	1065	1068	1052	1033	1045
16	1005	1015	1021	1027	1044	1040	1041	1040	1036	1039	1038	1036	1038	1038	1048	1056	1060	1061	1065	1066	1063	1050	1033	1038	1042
17	1032	1015	1033	1039	1044	1036	1033	1035	1035	1029	1028	1030	1039	1041	1044	1047	1050	1058	1059	1058	1057	1056	1051	1048	1042
18	1045	1043	1045	1050	1053	1053	1050	1046	1042	1038	1036	1036	1038	1041	1047	1051	1056	1058	1057	1054	1052	1051	1051	1050	1048
19 q	1047	1046	1047	1049	1051	1054	1051	1050	1044	1039	1038	1033	1033	1036	1045	1047	1051	1057	1055	1051	1050	1048	1048	1045	1046
20 d	1045	1045	1045	1046	1047	1046	1045	1036	1029	1026	1029	1028	1033	1035	1047	1063	1066	1066	1063	1059	1066	1051	1047	1033	1046
21	993	949	998	1016	1024	1026	1033	1037	1039	1039	1039	1039	1040	1039	1042	1051	1055	1056	1055	1054	1059	1056	1050	1042	*1035*
22	1044	1041	1045	1047	1046	1046	1046	1046	1046	1047	1044	1035	1033	1040	1044	1048	1051	1052	1050	1048	1050	1050	1046	1041	1045
23	1028	1028	1039	1041	1045	1046	1045	1044	1040	1038	1034	1031	1030	1035	1039	1039	1043	1049	1060	1059	1063	1057	1050	1044	1043
24	1045	1039	1036	1034	1021	1021	1033	1039	1039	1040	1037	1030	1030	1029	1032	1040	1050	1051	1051	1063	1061	1057	1054	1046	1041
25	1036	1018	1018	1015	1003	1010	1022	1026	1030	1038	1037	1032	1041	1054	1074	1063	1060	1057	1063	1081	1071	1057	1045	1016	1040
26	1038	1042	1045	1047	1047	1047	1045	1042	1036	1035	1034	1030	1030	1032	1032	1039	1042	1045	1044	1045	1045	1054	1046	1033	1041
27 d	1009	1021	1029	1030	1018	1018	1026	1035	1040	1039	1034	1027	1039	1046	1051	1056	1068	1064	1068	1063	1059	1053	1028	998	1038
28	1014	1030	1038	1032	1029	1012	1023	1029	1035	1028	1026	1029	1037	1045	1047	1050	1053	1057	1056	1055	1049	1047	1045	1047	1038
29	1027	1016	1029	1037	1044	1046	1044	1042	1046	1051	1048	1038	1039	1044	1046	1050	1055	1057	1053	1051	1049	1050	1048	1045	1044
30	1027	1033	1039	1036	1036	1044	1045	1048	1050	1045	1044	1041	1037	1039	1042	1045	1050	1057	1063	1059	1053	1051	1046	1044	1045
31	1039	1024	1033	1041	1047	1045	1040	1041	1041	1037	1033	1035	1039	1041	1047	1056	1056	1056	1058	1056	1052	1050	1047	1043	1044
Mean	1035	*1031*	1036	1039	1039	1039	1039	1038	1037	1035	1033	1031	1034	1038	1045	1052	1057	*1059*	1058	1058	1056	1053	1048	1041	1043

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

129 ESKDALEMUIR — JULY 1942

	TERRESTRIAL MAGNETIC ELEMENTS												3-hr. range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination			Vertical force							
	Maximum 16,000γ +		Minimum 16,000γ +		Range	Maximum 12° +	Minimum 12° +	Range	Maximum 44,000γ +		Minimum 44,000γ +	Range				
	h. m.	γ	γ	h. m.	γ	h. m. ′	′ h. m.	′	h. m.	γ	γ h. m.	γ				°A.
1	17 58	581	460	10 49	121	7 0 47·5	35·1 1 22	12·4	19 10	1074	1036 7 20	38	2,3,3,3,3,3,3,2	22	1	83·6
2 q	20 57	579	495	10 20) 10 22)	84	13 22 44·6	33·4 20 50	11·2	20 23	1057	1022 11 10	35	1,2,1,1,2,3,3,3	16	0	83·8
3 q	18 11	553	499	10 10	*54*	14 33 46·8	35·0 6 11	11·8	18 40	1053	1028 13 45	25	1,1,1,1,3,1,1,0	9	0	83·8
4 q	17 51	551	495	11 6	56	14 7 43·6	34·9 8 38	*8·7*	4 18	1048	1024 12 14	24	0,1,1,1,1,1,1,1	7	0	83·9
5 q	19 54	574	504	14 12	70	13 11 47·7	33·4 6 35	14·3	21 19	1052	1022 10 19	30	1,1,2,2,3,2,2,1	14	0	84·0
6	17 7	580	511	9 40	69	14 18 45·9	33·8 6 30	12·1	17 33	1059	1022 14 59	37	2,1,1,2,2,3,2,3	16	0	84·1
7	19 53	569	495	10 8	74	14 32 46·8	33·3 0 8	13·5	22 41	1051	1023 12 7	28	1,1,2,1,3,3,2,2	15	0	84·3
8 d	19 59	626	437	11 23	189	14 16 53·7	27·2 5 20	26·5	19 22	1079	1006 10 4	73	3,3,4,4,5,3,5,3	30	1	84·4
9	17 34	583	472	2 38	111	14 29 45·5	31·8 6 41	13·7	18 27	1071	1004 2 16	67	4,2,1,2,3,3,3,3	21	1	84·5
10	23 38	593	499	13 22	94	13 50 45·6	32·4 0 35	13·2	17 11	1054	1021 11 39	33	2,2,2,2,3,3,2,4	20	1	84·6
11 d	15 19	630	*420*	6 12	*210*	7 29 *54·8*	*22·1* 1 45	*32·7*	15 31	*1213*	981 8 0	*232*	4,4,5,3,4,5,4,3	32	2	84·7
12	18 25	581	425	10 17	156	13 53 47·3	33·3 8 19	14·0	20 37	1059	1023 5 40	36	2,2,2,4,3,4,4,2	23	1	84·8
13	0 33	566	488	11 47	78	12 40 44·4	31·9 1 32	12·5	18 13	1069	1028 1 9	41	3,2,2,2,2,3,2,1	17	1	84·8
14	16 2	575	495	9 23	80	14 3 47·6	32·9 20 40	14·7	16 25	1071	1028 12 0	43	2,2,2,2,3,4,3,3	21	1	84·9
15 d	17 55	*645*	470	9 17	175	16 41 46·8	24·4 21 3	22·4	17 31	1101	1010 24 0	91	2,2,3,4,4,5,5,4	29	1	85·0
16	19 8	573	475	9 22	98	13 6 47·8	27·9 1 19	19·9	19 25	1069	999 0 37	70	3,2,2,3,3,3,3,3	22	1	85·1
17	18 3	570	479	11 22	91	15 25 43·9	33·4 7 23	10·5	18 23	1060	1009 1 28	51	3,3,2,3,2,3,3,2	21	1	85·2
18	18 38	556	487	11 20	69	13 53 45·2	33·5 6 50	11·7	18 22	1059	1035 10 53	24	2,1,2,2,1,2,2,1	13	0	85·3
19 q	17 37	554	480	11 36	74	14 20 46·8	33·3 4 31	13·5	17 52	1057	1031 12 9	26	2,1,1,2,3,2,1,2	14	0	85·3
20 d	21 1	580	472	11 57	108	14 8 52·1	27·0 6 44	25·1	20 28	1069	1009 24 0	60	1,2,3,4,4,3,3,4	24	1	85·4
21	17 34	557	456	1 3	101	0 59 53·1	27·9 2 11	25·2	20 20	1060	*933* 1 17	127	5,3,2,3,2,3,2,3	23	1	85·4
22	22 19	558	485	10 50	73	14 32 44·1	33·6 6 51	10·5	17 20	1053	1030 12 19	*23*	2,2,2,3,3,2,2,2	18	0	85·5
23	18 46	581	507	9 59	74	15 57 47·4	34·0 5 43	13·4	20 30	1065	1021 0 55	44	3,2,2,1,3,3,3,2	19	1	85·6
24	19 13	581	507	13 16	74	15 25 46·2	33·2 8 19) 23 42)	13·0	20 15	1065	1018 4 53	47	2,2,2,1,2,3,3,2	17	1	85·7
25	22 58	600	469	14 59	131	13 53 48·2	24·6 19 46	23·6	19 44	1089	999 4 37	90	3,2,3,2,4,4,4,4	26	1	85·7
26	19 26	573	495	13 12	78	12 56 46·9	26·1 22 32	20·8	22 5	1059	1020 24 0	39	2,2,2,1,3,2,2,4	18	1	85·7
27 d	15 55	577	464	9 52	113	15 55 46·8	22·3 1 20	24·5	18 5	1070	993 23 34	77	4,3,3,3,4,4,3,3	27	1	85·7
28	19 44	586	475	5 21	111	13 39 46·0	32·3 20 57	13·7	17 9	1059	1002 0 1	57	3,3,3,2,3,3,4,2	23	1	85·9
29	24 0	557	486	8 58	71	0 30 46·5	31·6 7 47	14·9	17 24	1058	1009 1 5	49	3,2,2,2,2,2,2,3	18	0	85·9
30	18 29	565	479	9 32	86	13 20 47·0	33·4 5 47) 23 2)	13·6	18 22	1065	1023 0 32	42	3,2,2,3,3,3,3,2	21	1	86·0
31	16 0	553	470	12 13	83	1 20 46·1	32·6 7 47	13·5	18 49	1059	1020 1 42	39	3,2,2,2,3,2.2,2	18	0	86·0
Mean	— —	578	479	— —	99	— — 47·2	31·0 — —	16·2	— —	1069	1014 — —	55	2·5	19·8	0·68	85·0

q denotes an international quiet day and d an international disturbed day.

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

130 ESKDALEMUIR (H) — 16,000γ (0·16 C.G.S. unit) + — AUGUST 1942

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	534	525	519	522	526	532	530	522	510	499	496	501	510	519	527	527	527	530	534	542	539	547	538	531	524
2	532	531	531	527	526	522	522	522	518	511	506	504	507	522	525	506	523	535	541	543	550	539	539	542	526
3	538	534	522	523	523	519	519	518	515	510	504	510	511	507	523	522	522	538	542	544	547	552	539	542	526
4 q	531	526	526	526	529	524	524	522	523	518	508	503	510	510	510	517	529	537	546	542	541	535	534	527	525
5	529	538	527	526	527	527	527	522	518	506	496	492	495	509	525	531	532	535	534	543	550	541	545	542	526
6	532	535	534	533	534	534	527	519	516	519	515	522	530	533	546	550	499	535	553	542	538	541	529	523	*531*
7	522	527	534	522	522	523	508	479	502	484	472	492	506	508	512	511	512	526	539	543	542	561	530	523	517
8 q	523	521	521	524	522	516	512	511	510	499	497	510	518	519	514	514	521	529	529	535	534	531	533	527	520
9	527	527	527	526	527	526	524	523	519	515	515	505	490	492	507	519	518	525	534	547	543	542	543	551	524
10 d	550	543	545	535	538	522	515	514	518	509	502	494	511	500	534	569	495	557	546	538	527	530	535	546	528
11	539	526	526	520	525	530	511	507	490	489	483	472	499	491	511	518	524	530	531	538	534	534	530	531	516
12	527	531	515	524	531	518	519	496	488	496	494	505	505	511	519	524	531	543	543	550	538	535	529	523	521
13 q	515	522	522	527	531	529	519	514	507	506	502	504	508	517	522	529	534	534	534	535	534	534	539	540	523
14	537	530	522	523	524	523	519	515	507	492	495	503	522	526	526	527	531	534	535	534	534	534	531	527	523
15	529	529	529	527	523	523	519	511	503	502	507	502	513	514	524	531	537	553	565	565	538	542	542	537	528
16 d	568	550	526	498	503	520	523	508	507	505	492	492	499	515	527	547	543	566	550	557	569	510	518	531	526
17	497	514	508	499	503	507	513	503	510	488	488	478	507	520	524	538	529	543	538	542	530	540	519	522	515
18 d	519	522	518	524	524	519	499	495	503	451	457	471	481	507	494	524	529	530	531	524	519	530	531	524	*509*
19 d	514	532	519	503	513	519	506	495	464	479	484	500	495	521	519	525	513	539	543	535	535	562	565	525	517
20	530	518	520	502	519	513	510	504	488	498	473	498	504	504	515	522	526	531	539	526	531	536	531	521	515
21	523	524	517	517	515	519	503	508	506	504	507	501	510	518	534	523	523	523	527	527	538	529	534	522	519
22	531	522	512	522	511	510	519	512	501	496	496	507	513	515	518	528	520	531	534	536	538	546	550	522	520
23 d	491	513	506	507	511	506	507	496	492	479	492	507	542	492	532	565	573	526	535	535	503	515	511	495	514
24	503	503	487	504	492	502	503	495	484	491	490	500	504	508	518	530	518	537	538	550	519	527	530	529	511
25	517	514	507	519	499	489	483	482	484	484	489	500	502	508	511	526	524	532	538	533	531	527	522	519	510
26	520	517	519	515	527	508	512	508	500	499	498	503	511	504	512	523	524	533	545	554	550	526	530	527	519
27	515	519	515	514	523	523	503	488	499	480	485	474	499	501	513	512	522	530	541	527	530	527	524	524	512
28 q	526	519	518	518	519	518	511	510	499	488	487	488	499	506	509	515	518	525	528	530	531	527	529	522	514
29 q	523	523	522	522	523	522	517	510	503	503	503	501	506	511	519	525	531	540	540	531	527	536	527	528	521
30	529	526	526	523	522	524	522	515	511	507	511	510	515	535	536	542	553	562	535	543	542	537	544	543	530
31	554	538	533	537	535	540	534	534	531	517	505	497	503	530	527	524	518	515	517	527	527	525	529	526	526
Mean	527	526	521	520	521	520	515	508	504	497	*495*	498	507	512	520	528	526	536	538	*539*	536	535	533	529	521

MAGNETIC DECLINATION (WEST)

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

131 ESKDALEMUIR (D) — 12° + — AUGUST 1942

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	37·6	36·4	35·8	34·3	35·3	35·1	35·9	36·2	36·9	36·8	37·7	40·9	43·2	44·0	43·4	42·3	41·8	41·1	40·6	40·4	38·6	37·7	37·5	37·9	38·6
2	38·8	38·1	37·7	37·0	35·4	35·1	34·2	32·7	33·7	35·2	37·6	40·4	43·6	46·1	46·7	45·0	44·1	42·6	41·2	40·6	38·0	39·8	38·0	39·0	39·2
3	36·3	33·5	33·4	35·1	34·9	35·3	36·8	35·0	35·1	37·1	38·9	41·7	44·5	46·4	45·9	43·8	41·0	40·9	40·9	39·5	39·6	38·2	39·7	38·9	38·9
4 q	36·8	36·1	36·9	37·9	38·1	35·9	35·8	35·5	35·2	36·9	37·9	40·6	42·3	42·7	43·3	42·6	41·6	41·3	40·7	39·5	38·9	39·5	38·7	37·2	38·8
5	36·9	39·1	37·1	36·8	36·1	36·7	35·7	34·5	35·0	36·0	37·2	40·5	44·0	44·9	44·3	43·4	42·1	40·8	40·2	39·0	39·1	37·5	36·1	35·3	38·7
6	37·2	37·0	36·1	36·1	36·1	35·3	35·4	34·9	34·3	37·0	39·8	42·5	45·2	47·8	47·6	47·6	46·0	43·3	42·6	40·9	35·9	37·1	37·9	33·6	39·5
7	35·4	38·1	34·6	35·8	35·9	33·8	34·3	36·8	38·0	39·8	41·4	44·2	45·7	46·2	46·7	45·8	43·5	40·5	37·6	39·4	37·8	30·6	36·6	37·3	39·0
8 q	37·9	37·7	39·1	37·3	37·2	36·2	36·0	35·7	36·1	37·3	39·4	42·3	44·1	44·2	43·5	42·4	41·2	40·0	39·7	39·0	38·9	38·8	37·3	37·9	39·1
9	38·0	37·9	37·8	37·9	37·1	35·8	35·0	34·2	35·0	37·1	39·7	43·0	45·0	45·9	44·9	44·5	43·9	40·3	37·0	38·5	39·3	39·8	40·0	40·1	39·5
10 d	39·5	38·7	38·8	35·9	34·3	33·5	33·7	38·5	37·1	37·2	40·5	41·6	45·0	47·1	47·2	48·9	45·8	42·9	36·8	25·7	35·5	34·4	34·2	39·7	38·9
11	37·3	37·3	36·5	38·0	39·6	36·9	34·5	34·2	35·3	36·9	41·1	42·6	44·2	44·8	43·5	42·2	39·6	38·7	38·8	39·4	39·6	39·6	39·0	39·1	39·1
12	37·8	38·9	38·9	40·2	39·4	36·0	36·8	36·9	38·8	42·1	43·5	46·1	47·5	46·3	43·4	41·6	39·5	38·7	39·7	40·0	39·6	39·7	36·9	35·1	40·1
13 q	35·1	40·0	37·9	36·0	34·6	34·8	34·3	34·3	35·1	37·0	39·4	41·5	43·1	43·2	42·2	40·9	39·8	38·7	38·7	39·4	39·5	38·9	39·4	37·1	38·4
14	37·6	37·6	36·1	36·3	36·4	35·3	35·2	35·3	37·0	39·9	43·0	44·9	46·3	45·1	43·1	41·4	39·6	38·7	37·9	38·6	38·7	38·5	38·5	39·1	39·2
15	38·9	38·8	38·7	37·9	36·8	35·3	35·0	35·0	35·4	37·6	40·4	44·2	45·8	44·5	43·3	43·0	42·3	41·6	41·8	42·6	42·4	38·5	36·1	35·8	39·7
16 d	33·5	33·2	25·9	34·8	38·2	33·6	35·0	32·3	32·4	34·9	39·1	42·3	45·1	47·8	48·3	47·3	45·8	44·8	44·4	44·8	20·5	32·6	35·1	32·2	*37·7*
17	34·2	32·6	33·1	36·0	35·3	33·7	34·0	34·4	35·9	37·0	39·7	42·6	42·7	45·0	45·3	46·0	42·4	39·3	39·7	38·1	36·9	38·8	33·3	37·1	38·0
18 d	36·7	36·6	37·6	37·8	35·6	34·3	35·7	40·4	37·7	38·3	40·8	43·3	45·0	46·2	48·5	44·7	44·9	42·9	40·8	39·6	35·2	38·6	41·2	41·5	40·2
19 d	40·7	36·3	39·0	40·4	37·9	34·5	33·9	35·7	36·0	34·7	38·9	43·0	44·9	45·9	45·8	44·9	38·8	39·4	32·0	37·6	38·1	34·9	34·1	37·3	38·5
20	33·0	38·9	38·2	35·0	35·1	33·7	32·4	32·9	32·6	36·9	41·6	45·9	49·2	47·8	45·3	43·3	42·0	41·3	40·4	36·9	38·7	39·6	37·9	39·9	39·1
21	37·9	37·0	38·8	39·6	36·3	36·2	34·5	35·9	35·2	36·2	39·9	43·8	45·9	46·7	42·1	42·1	40·5	38·0	38·6	37·6	36·0	38·3	38·9	40·4	39·0
22	40·5	36·9	34·6	35·9	37·8	41·4	36·9	34·0	34·9	35·4	38·0	41·4	43·1	43·1	41·5	41·6	40·0	39·5	39·7	39·6	39·5	35·9	30·4	36·8	38·3
23 d	39·7	44·3	36·7	42·2	38·9	35·2	34·5	33·4	34·5	36·7	40·6	42·8	48·4	47·3	50·5	42·2	39·8	40·6	40·0	28·5	37·9	39·2	26·0	31·9	38·8
24	37·4	38·0	43·3	37·0	35·9	35·8	34·4	34·6	34·9	37·2	39·8	43·2	46·0	46·4	44·5	42·9	38·1	37·3	35·9	31·8	29·7	33·6	37·8	37·4	38·0
25	37·1	39·4	37·6	40·1	36·8	38·3	34·6	33·3	32·8	35·9	39·7	43·2	45·7	44·3	42·7	42·4	44·8	37·7	36·8	36·3	35·7	37·0	38·0	36·6	38·6
26	37·9	38·6	39·8	36·9	35·9	33·7	34·5	33·5	35·3	36·2	39·0	43·0	46·2	47·0	45·0	43·0	40·3	39·0	39·5	32·0	36·5	36·0	34·5	34·3	38·2
27	40·2	38·8	35·4	35·2	36·8	36·1	36·0	36·1	35·4	35·3	37·6	41·7	44·8	46·8	44·2	42·2	40·6	37·5	36·0	38·2	38·8	38·6	37·8	37·9	38·7
28 q	37·6	37·0	36·9	36·7	36·5	36·2	35·3	35·1	34·5	36·7	37·9	41·1	42·5	42·7	41·7	41·2	39·8	39·5	39·3	39·0	37·8	37·6	37·0	37·6	38·2
29 q	37·5	37·3	37·0	37·0	36·9	36·4	35·8	35·9	35·3	36·2	37·9	39·9	42·1	44·4	44·7	43·3	42·3	40·2	38·9	39·6	38·7	38·1	37·6	37·7	38·8
30	37·8	37·2	37·1	37·7	37·3	36·9	36·0	35·0	35·3	36·7	40·0	43·8	45·1	48·4	48·5	47·7	45·9	45·5	42·5	39·6	39·6	36·9	36·9	37·0	*40·2*
31	39·8	35·3	34·3	34·2	34·7	34·0	35·7	35·9	34·3	34·5	38·9	43·4	46·8	48·6	47·3	45·9	45·0	42·4	41·3	40·3	39·5	38·5	36·4	36·1	39·3
Mean	37·5	37·5	36·8	37·1	36·5	35·5	*35·1*	35·1	35·3	36·9	39·6	42·6	45·0	*45·7*	45·0	43·7	42·0	40·5	39·3	38·1	37·4	37·5	36·7	37·3	38·9

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

132 ESKDALEMUIR (V) — 44,000γ (0·44 C.G.S. unit) + — AUGUST 1942

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	1041	1038	1034	1038	1039	1039	1039	1041	1045	1045	1041	1036	1032	1036	1041	1048	1049	1050	1050	1051	1052	1047	1045	1045	1043
2	1044	1044	1045	1047	1049	1048	1046	1045	1041	1034	1029	1024	1021	1029	1038	1044	1044	1050	1050	1051	1048	1045	1045	1038	1042
3	1032	1029	1027	1030	1037	1041	1039	1039	1039	1035	1032	1032	1033	1037	1041	1046	1052	1053	1056	1053	1053	1046	1039	1035	1040
4 q	1039	1041	1045	1045	1043	1042	1041	1041	1037	1032	1032	1028	1024	1031	1036	1042	1044	1047	1047	1051	1051	1048	1047	1047	1041
5	1045	1039	1038	1041	1045	1047	1045	1045	1045	1039	1034	1033	1028	1028	1033	1039	1047	1051	1051	1050	1050	1050	1049	1040	1042
6	1041	1041	1044	1045	1046	1045	1044	1040	1033	1029	1027	1022	1022	1026	1036	1050	1068	1064	1062	1060	1063	1053	1051	1042	1044
7	1032	1017	1018	1030	1036	1040	1038	1033	1027	1024	1025	1021	1024	1029	1036	1044	1048	1056	1059	1056	1054	1039	1033	1039	1036
8 q	1042	1045	1045	1045	1047	1047	1047	1045	1041	1039	1032	1018	1021	1027	1036	1039	1042	1047	1050	1050	1050	1050	1048	1046	1042
9	1046	1046	1046	1047	1047	1051	1050	1045	1041	1028	1023	1022	1023	1028	1038	1050	1057	1062	1065	1056	1048	1047	1047	1045	1044
10 d	1044	1045	1042	1041	1042	1045	1045	1041	1041	1041	1033	1029	1031	1037	1039	1051	1071	1072	1101	1100	1080	1060	1050	1033	1051
11	1029	1041	1047	1046	1045	1041	1044	1045	1046	1044	1035	1033	1085	1041	1050	1057	1058	1059	1057	1053	1052	1052	1052	1051	1046
12	1051	1047	1047	1042	1040	1042	1040	1041	1040	1034	1032	1032	1039	1050	1054	1059	1062	1060	1057	1057	1057	1053	1053	1048	1047
13 q	1046	1040	1039	1045	1047	1047	1048	1047	1045	1045	1038	1030	1032	1038	1048	1050	1051	1050	1050	1046	1045	1046	1045	1042	1044
14	1038	1036	1042	1047	1050	1050	1050	1048	1045	1042	1038	1035	1033	1039	1047	1051	1052	1053	1048	1046	1046	1046	1046	1045	1045
15	1046	1046	1046	1047	1051	1052	1052	1049	1045	1042	1030	1023	1023	1035	1042	1047	1050	1051	1050	1056	1068	1063	1053	1047	1046
16 d	1027	1020	1009	1002	991	991	1009	1027	1035	1035	1033	1033	1035	1036	1041	1050	1062	1066	1071	1072	1071	1045	1044	1039	*1035*
17	1018	1022	1030	1038	1030	1039	1045	1046	1047	1045	1039	1034	1036	1042	1050	1059	1077	1088	1085	1076	1069	1033	1039	1036	1047
18 d	1032	1045	1047	1045	1051	1051	1050	1041	1041	1043	1045	1044	1050	1072	1081	1084	1070	1064	1066	1069	1073	1060	1053	1035	*1055*
19 d	1010	1021	1030	1029	1040	1048	1050	1051	1051	1050	1045	1038	1046	1048	1048	1056	1075	1083	1087	1072	1060	1044	1014	1003	1046
20	1004	1002	993	1018	1024	1034	1040	1041	1043	1038	1032	1027	1028	1039	1042	1046	1050	1051	1059	1075	1064	1054	1051	1045	1037
21	1047	1047	1046	1041	1044	1047	1052	1051	1049	1043	1039	1039	1042	1048	1060	1063	1063	1059	1057	1054	1054	1051	1047	1036	1049
22	1023	1033	1038	1042	1042	1033	1035	1041	1039	1039	1039	1036	1034	1036	1042	1046	1048	1047	1048	1048	1048	1050	1036	1027	1040
23 d	1007	969	991	991	1003	1020	1035	1041	1040	1034	1034	1032	1034	1044	1051	1105	1138	1139	1114	1095	1066	1057	1039	1030	1046
24	1036	1037	1022	1026	1038	1040	1047	1050	1050	1050	1044	1042	1039	1042	1055	1064	1080	1082	1080	1072	1064	1032	1028	1021	1048
25	1034	1041	1044	1036	1020	1017	1023	1039	1047	1038	1033	1032	1036	1041	1052	1059	1058	1062	1060	1058	1057	1044	1036	1048	1042
26	1046	1046	1041	1039	1044	1044	1046	1047	1045	1040	1036	1035	1038	1048	1055	1058	1065	1063	1059	1064	1047	1042	1038	1033	1047
27	1019	1017	1037	1045	1048	1051	1052	1051	1051	1047	1045	1046	1050	1053	1065	1068	1065	1063	1062	1059	1057	1056	1055	1053	1051
28 q	1051	1051	1052	1053	1053	1054	1054	1052	1051	1048	1044	1039	1035	1038	1045	1048	1051	1051	1051	1051	1051	1052	1051	1051	1049
29 q	1051	1051	1052	1052	1052	1052	1053	1053	1050	1045	1045	1042	1039	1040	1045	1051	1051	1054	1057	1054	1054	1048	1048	1049	1049
30	1048	1048	1047	1047	1050	1051	1052	1049	1046	1039	1033	1033	1031	1033	1038	1042	1045	1046	1047	1051	1051	1051	1048	1048	1045
31	1038	1036	1039	1038	1038	1036	1039	1036	1035	1035	1032	1034	1042	1056	1081	1087	1087	1086	1080	1069	1064	1061	1053	1050	1052
Mean	1036	1035	1036	1038	1040	1041	1043	1044	1043	1039	1035	*1032*	1033	1040	1047	1055	1061	1062	*1063*	1061	1057	1049	1045	1040	1045

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

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	TERRESTRIAL MAGNETIC ELEMENTS												3-hr. range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination			Vertical force							
	Maximum 16,000γ +		Minimum 16,000γ +		Range	Maximum 12° +	Minimum 12° +	Range	Maximum 44,000γ +		Minimum 44,000γ +		Range			
	h. m.	γ	γ	h. m.	γ	h. m. ′	′	′	h. m.	γ	γ	h. m.	γ			°A.
1	21 28	561	495	10 2	66	13 25 44·2	33·2	3 0 11·0	20 14	1053	1029	12 25	24	2,2,1,1,2,2,2,2	14	0 86·0
2	20 23	563	484	15 21	79	14 0 47·6	31·6	7 42 16·0	20 3	1051	1020	12 13	31	1,1,2,1,3,3,3,2	16	0 86·1
3	21 25	559	499	10 21	60	13 17 46·8	32·4	2 44 14·4	18 29	1057	1024	2 40	33	3,2,2,2,2,3,2,2	18	0 86·1
4 q	19 18	553	499	11 6	54	14 16 43·4	35·0	8 18 *8·4*	20 0	1053	1023	12 39	30	1,1,2,2,2,2,2,1	13	0 86·0
5	22 48	565	484	12 18	81	12 52 45·5	33·7	21 46 11·8	17 20	1053	1027	12 50	26	2,2,1,2,2,2,3,3	17	0 85·9
6	14 39	577	472	16 14	105	14 38 50·0	28·9	23 51 21·1	16 35	1069	1021	11 40	48	1,1,1,3,4,4,3,3	20	1 85·8
7	21 5	584	456	10 29	128	13 49 47·7	23·2	21 0 24·5	18 8	1060	1015	1 32	45	3,2,3,3,2,2,4,4	23	1 85·8
8	19 0	538	494	10 35	*44*	13 42 44·6	34·2	7 36 10·4	19 48	1051	1017	11 42	34	1,1,2,2,3,1,1,1	12	0 85·8
9	23 2	554	483	12 50	71	13 30 46·5	32·6	7 31 13·9	18 12	1068	1020	12 19	48	1,1,2,2,2,2,3,2	15	0 85·9
10 d	15 30	609	460	16 4	149	15 22 50·6	21·7	19 5 28·9	18 55	1123	1028	11 48	95	2,3,3,2,4,5,4,3	26	1 86·0
11	0 22	546	460	11 20	86	13 0 45·2	32·8	9 10 12·4	17 7	1062	1022	0 1	40	2,3,2,3,3,1,1,1	16	1 86·1
12	19 8	565	483	10 31	82	12 17 47·7	34·7	5 22 13·0	16 40	1064	1028	11 0	36	3,2,2,2,2,2,3,2	18	1 86·2
13 q	23 18	552	499	10 13	53	12 50 43·6	34·1	7 11 9·5	16 42	1053	1029	11 58	24	3,1,1,1,1,1,1,2	11	0 86·2
14	0 49	542	491	9 3	51	12 28 46·7	34·2	7 5 12·5	17 3	1054	1030	12 13	24	2,2,1,2,2,2,1,1	13	0 86·2
15	20 1	588	495	11 0	93	20 20 46·7	32·4	23 12 14·3	20 37	1074	1021	11 58	53	1,1,0,2,2,2,4,3	15	1 86·4
16 d	20 27	616	462	4 1	154	13 59 49·4	*6·4*	20 21 *43·0*	20 11	1105	982	5 11	123	4,4,3,3,3,4,5,4	30	1 86·4
17	21 6	588	456	11 53	132	16 3 48·0	28·8	0 59 19·2	17 22	1092	1014	0 21	78	3,2,2,3,4,4,3,4	25	1 86·5
18 d	18 58	556	431	9 41	125	14 28 52·1	32·4	0 3 19·7	15 15	1087	1021	24 0	66	3,2,3,4,4,3,3,3	25	1 86·6
19 d	21 54	598	*429*	8 46	169	14 42 47·3	20·7	18 32 26·6	18 30	1092	999	23 15	93	3,3,3,4,4,4,4,4	29	1 86·7
20	18 29	565	458	10 39	107	13 9 51·1	29·3	0 39 21·8	19 18	1077	990	2 30	87	4,3,2,3,3,3,3,2	23	1 86·8
21	14 23	557	491	14 1	66	13 5 47·6	34·1	6 25 13·5	15 48	1064	1030	10 34	34	2,2,2,2,4,3,2,2	19	1 86·8
22	22 8	599	479	9 23	120	0 4) 0 14) 44·1	28·0	22 3 16·1	21 40	1052	1021	0 30	31	3,3,3,3,2,3,2,4	23	1 86·8
23 d	16 18	*627*	449	9 11	*178*	14 28 *52·6*	18·9	23 1 33·7	15 56	*1149*	*958*	1 53	*191*	4,3,2,4,5,5,4,4	31	1 86·9
24	19 3	608	472	2 21	136	13 7 47·6	23·5	20 58 24·1	17 57	1084	1017	23 14	67	3,3,2,2,3,4,5,3	25	1 87·0
25	20 2	551	464	6 3	87	12 25 46·8	31·5	6 51 15·3	18 0	1064	1012	5 35	52	2,3,3,3,3,3,2,3	22	1 87·0
26	19 50	585	479	9 2	106	13 8 48·6	24·4	19 47 24·2	19 32	1069	1030	24 0	39	2,3,2,3,3,3,4,3	23	1 87·0
27	17 59	550	457	11 40	93	13 52 47·7	34·1	0 9 13·6	15 10	1071	1011	0 45	60	3,2,3,3,3,2,2,1	19	1 87·1
28 q	20 50	534	481	10 51	53	12 48 43·2	34·2	8 21 9·0	5 30	1056	1033	13 0	23	1,2,2,1,1,2,1,1	11	0 87·2
29 q	21 7	550	497	10 24	53	13 26 45·1	34·3	21 0 10·8	18 30	1059	1038	12 39	*21*	1,1,1,2,2,1,2,2	12	0 87·2
30	16 59	576	491	18 29	85	13 40 49·1	34·6	7 32 14·5	20 24	1053	1028	12 46	25	1,1,1,2,2,3,4,2	16	1 87·2
31	0 30	565	491	11 48	74	13 49 50·0	33·3	3 41 16·7	17 0	1088	1030	10 16	58	3,2,2,3,3,3,2,2	20	1 87·3
Mean	- -	570	476	- -	95	- - 47·3	29·8	- - 17·5	- -	1071	1018	- -	53	2·4	19·7	0·65 86·5

q denotes an international quiet day and d an international disturbed day.

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

134 ESKDALEMUIR (H) — 16,000γ (0·16 C.G.S. unit) + — SEPTEMBER 1942

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	527	519	522	519	523	523	522	513	504	495	491	502	511	513	530	534	530	522	519	522	521	519	524	523	518
2	524	522	527	522	526	522	476	503	499	506	488	491	494	504	508	519	536	535	542	542	534	537	523	522	517
3	513	516	524	530	523	519	519	506	499	488	479	494	497	503	512	515	522	526	531	531	531	530	527	526	515
4	527	527	522	526	527	527	527	519	515	496	493	492	496	514	526	525	518	526	525	526	526	528	529	528	519
5	527	534	526	518	541	539	536	524	515	490	485	484	498	503	517	522	511	526	536	530	526	522	522	528	519
6 d	528	541	527	527	533	524	525	528	507	506	511	503	513	499	481	503	526	531	529	517	522	522	557	507	519
7	511	518	519	520	510	512	511	507	503	499	492	508	513	515	524	530	518	526	524	525	524	529	538	519	516
8	519	519	520	517	515	523	522	522	519	511	506	500	504	515	524	530	518	511	522	524	524	523	526	528	518
9	526	526	530	530	528	523	515	514	504	498	499	497	523	522	530	526	526	518	518	526	526	531	530	527	521
10	527	536	525	533	523	528	526	508	500	492	489	498	512	511	510	515	515	523	522	527	530	526	531	527	518
11 d	531	538	531	530	528	524	531	527	522	504	498	508	519	526	522	539	546	561	543	543	520	511	558	545	*529*
12 d	486	472	499	495	484	514	476	453	426	426	432	464	479	499	519	527	530	530	526	534	565	543	532	501	*496*
13	507	508	511	504	501	508	514	504	498	475	492	497	507	508	526	522	521	531	530	519	514	500	538	515	510
14	496	503	495	495	495	501	502	495	487	499	492	494	499	492	510	514	527	535	529	562	524	498	526	484	506
15	510	536	504	499	479	498	508	515	507	507	483	496	511	511	507	527	518	526	538	519	534	524	528	526	513
16	512	523	531	515	523	502	518	511	506	487	479	494	504	515	524	526	538	519	522	524	536	565	515	503	516
17 d	511	505	511	526	520	519	504	496	495	484	426	443	484	487	500	506	518	543	533	511	510	557	523	519	505
18	493	502	504	507	495	500	505	498	499	501	491	497	504	518	511	496	523	511	546	507	538	530	530	527	510
19	518	499	503	500	511	511	511	507	507	492	485	504	511	496	514	506	515	534	522	519	519	552	523	517	511
20	526	518	516	515	511	518	521	518	509	499	493	499	469	518	519	519	515	507	519	543	527	519	519	542	515
21 d	519	507	494	518	488	495	508	502	476	433	479	492	495	514	520	519	507	531	542	524	521	527	533	526	507
22	522	522	515	506	496	476	506	511	499	485	487	488	491	502	524	522	530	500	519	516	526	539	524	523	510
23	517	522	513	513	518	515	511	502	491	495	500	506	514	519	523	526	522	524	526	527	527	524	524	534	516
24	537	511	505	517	517	515	514	511	511	500	496	495	511	512	514	509	513	520	527	526	522	526	527	520	515
25 q	518	516	518	519	519	519	526	523	517	500	495	492	496	508	508	517	521	521	523	526	526	532	535	536	517
26 q	525	524	523	526	526	527	530	527	522	502	492	488	492	506	511	507	512	506	508	533	528	531	539	525	517
27	526	529	531	530	526	528	526	522	518	505	500	492	497	498	500	508	521	531	531	536	527	525	550	519	520
28 q	522	526	526	523	525	526	524	519	515	506	495	492	488	500	518	527	526	523	530	533	532	526	526	530	519
29 q	534	523	523	523	526	530	531	530	520	504	494	490	495	504	511	520	531	527	525	529	530	531	531	529	520
30 q	527	529	527	527	527	530	530	524	518	503	492	502	504	510	515	524	530	533	524	516	524	525	527	531	521
Mean	519	519	517	518	515	517	516	511	504	493	*488*	493	501	508	515	519	523	525	528	527	527	528	*531*	523	515

MAGNETIC DECLINATION (WEST)

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

135 ESKDALEMUIR (D) — 12° + — SEPTEMBER 1942

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	37·1	37·1	37·7	37·1	37·3	35·5	34·7	33·6	33·7	35·4	38·1	43·0	47·7	48·1	50·4	51·3	48·5	44·4	38·6	36·2	36·9	37·1	37·6	37·8	39·8
2	38·1	39·5	43·2	38·0	35·2	33·9	38·8	44·8	40·0	36·2	39·6	42·2	43·4	44·9	43·5	42·4	42·2	41·3	40·5	40·3	39·6	41·3	40·0	31·8	*40·0*
3	33·7	35·2	36·1	36·2	34·3	35·1	34·3	33·3	33·4	35·2	39·1	43·6	46·9	46·1	44·3	41·9	39·6	38·6	38·1	38·5	38·5	38·0	37·7	37·6	38·1
4	36·9	36·8	36·0	36·0	36·0	35·2	34·1	33·5	33·7	36·6	39·9	43·1	45·8	47·3	46·8	45·7	42·3	37·8	35·2	32·3	35·9	36·8	37·7	38·5	38·3
5	38·7	38·6	36·8	38·0	38·6	35·1	35·2	34·3	35·3	38·5	42·2	43·4	45·1	45·9	45·2	44·0	43·8	39·8	38·8	37·9	33·2	36·5	37·3	37·9	39·2
6 d	37·9	41·3	34·1	33·7	34·9	35·5	39·0	41·3	41·7	44·0	41·1	42·4	44·5	47·4	48·4	45·7	40·7	38·6	35·6	39·9	39·7	38·7	34·7	33·3	39·8
7	35·4	36·0	35·9	36·0	38·0	36·3	36·8	36·2	36·0	39·2	40·4	42·3	43·2	43·3	42·7	42·0	36·1	36·8	39·8	40·4	39·6	37·7	32·9	34·7	38·2
8	34·0	37·7	38·0	39·7	37·7	38·5	38·0	39·9	38·6	37·7	38·5	41·3	41·8	41·6	41·2	40·5	39·9	38·8	39·4	39·3	38·7	37·9	37·9	37·7	38·9
9	37·2	37·6	37·7	37·6	37·7	35·8	35·2	35·0	34·9	35·2	37·1	39·5	41·5	42·7	43·2	41·7	40·3	39·6	36·9	37·3	37·7	38·0	37·9	37·7	38·1
10	37·7	38·0	38·0	41·6	36·9	36·0	34·1	35·0	35·1	36·6	39·5	42·2	44·6	46·0	44·9	42·7	42·4	40·6	39·0	38·8	38·0	37·0	35·5	35·0	39·0
11 d	36·2	35·5	35·0	34·5	35·5	37·1	36·9	35·9	35·3	37·1	39·6	43·9	47·4	48·9	50·9	49·2	46·0	46·8	42·3	35·4	33·5	35·0	33·5	38·7	39·6
12 d	25·8	28·3	35·4	35·1	35·5	37·0	39·5	47·7	44·9	40·6	39·4	42·4	44·4	42·0	43·3	44·3	35·0	37·1	39·9	39·3	31·3	30·6	31·7	34·8	37·7
13	37·8	39·5	35·7	33·2	35·4	35·9	35·9	35·1	35·1	37·3	36·3	38·9	41·6	43·4	45·1	45·7	42·3	40·4	35·0	27·3	27·2	36·7	34·2	32·4	37·0
14	29·7	34·4	37·7	36·2	37·9	35·7	35·4	35·0	37·0	35·4	38·8	39·9	42·4	41·7	43·5	42·3	36·3	30·7	38·8	35·1	31·7	30·9	35·3	37·0	36·6
15	40·2	37·0	33·5	37·9	40·2	38·7	36·9	34·4	34·8	35·6	37·3	38·9	41·3	44·3	40·4	41·1	41·8	38·0	32·5	39·8	38·6	37·4	37·1	36·3	38·1
16	35·2	41·3	39·7	36·5	34·8	38·0	37·8	34·5	33·7	35·1	36·3	40·5	45·3	44·4	43·4	42·3	40·9	39·1	38·7	38·5	36·9	30·7	29·0	34·5	37·8
17 d	32·5	38·6	38·6	36·2	35·3	35·3	33·1	32·2	32·5	35·5	35·9	38·1	44·8	46·3	46·6	42·7	42·9	32·0	27·0	32·6	34·7	33·1	35·9	34·2	*36·5*
18	35·9	40·6	41·1	38·0	36·9	36·4	36·8	35·5	36·0	37·2	38·0	40·5	41·7	42·6	45·1	42·6	40·3	39·5	23·2	33·3	37·4	35·1	42·7	35·7	38·0
19	32·6	39·7	37·9	39·1	36·2	34·6	36·9	34·8	35·5	38·9	39·9	41·9	44·9	45·9	44·2	42·7	43·4	32·1	34·6	37·7	37·9	35·2	35·0	36·8	38·3
20	37·1	40·9	34·8	36·1	38·3	37·9	36·1	36·1	35·5	36·6	39·5	44·1	44·1	42·7	44·8	41·9	40·8	39·2	35·3	31·7	31·1	31·4	36·3	37·7	37·9
21 d	37·7	33·4	42·6	38·8	37·6	45·4	36·8	34·2	36·4	38·7	37·5	43·3	45·8	39·7	43·1	42·2	40·3	34·3	31·5	34·8	36·9	38·6	39·8	38·0	38·6
22	37·4	36·3	37·2	38·0	40·4	39·8	36·5	34·8	35·1	38·1	40·3	42·9	43·2	43·4	42·9	41·3	39·8	35·4	36·6	38·8	36·9	35·2	31·0	37·0	38·3
23	35·6	33·3	33·3	36·9	36·6	35·9	35·5	35·5	35·5	37·0	39·8	42·3	43·0	42·4	41·3	40·5	39·8	39·6	39·1	38·7	38·6	38·0	37·7	38·7	38·1
24	33·4	29·6	33·5	36·7	36·7	36·1	35·5	35·0	35·5	36·1	40·0	43·2	45·3	44·3	43·4	41·2	38·9	38·8	38·8	37·9	37·1	37·8	35·5	35·7	37·7
25 q	36·2	36·5	38·7	38·1	36·1	37·1	35·3	33·9	33·5	34·5	36·8	39·8	41·7	43·1	42·4	42·3	40·8	39·4	39·5	39·1	38·3	36·9	34·1	34·7	37·9
26 q	36·3	37·1	37·5	37·1	37·0	37·0	36·4	35·5	34·6	35·1	37·7	41·5	45·2	47·5	48·1	47·0	44·4	40·7	38·8	38·7	37·9	36·4	37·3	34·4	39·1
27	36·1	37·1	36·1	35·2	35·4	34·4	33·5	34·5	35·0	35·5	38·9	42·4	46·7	46·8	45·1	44·5	41·4	40·0	39·1	38·7	38·5	36·4	31·6	31·4	38·1
28 q	34·9	36·8	37·1	36·1	36·8	36·1	35·7	35·1	34·9	35·6	37·6	41·3	44·9	44·3	43·3	41·4	40·5	39·1	38·8	38·6	38·0	34·4	34·1	33·6	37·9
29 q	35·0	36·0	36·7	36·7	36·9	36·7	35·5	34·1	33·1	33·4	35·9	39·6	43·0	45·0	45·7	44·4	43·1	41·7	39·1	38·6	37·8	36·9	36·8	36·8	38·3
30 q	36·8	36·9	37·0	36·9	37·1	36·8	36·8	34·7	33·9	34·3	36·0	40·4	43·0	43·9	43·5	42·3	40·6	39·5	38·8	36·9	37·7	37·7	37·1	37·1	38·2
Mean	*35·6*	36·9	37·1	36·9	36·8	36·6	36·1	35·9	35·7	36·7	38·6	41·6	44·1	44·5	*44·6*	43·3	41·2	38·7	37·0	37·1	36·5	36·1	35·8	35·9	38·3

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

136 ESKDALEMUIR (V) — 44,000γ (0·44 C.G.S. unit) + — SEPTEMBER 1942

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	1045	1046	1049	1049	1049	1050	1051	1050	1047	1042	1036	1030	1031	1042	1051	1068	1091	1108	1109	1093	1078	1066	1057	1050	*1058*
2	1050	1051	1038	1042	1048	1048	1045	1027	1028	1037	1034	1032	1033	1040	1048	1049	1052	1055	1054	1055	1056	1046	1024	1036	1043
3	1043	1048	1048	1045	1044	1046	1050	1050	1051	1048	1042	1036	1037	1042	1046	1050	1052	1054	1051	1050	1050	1049	1049	1049	1047
4	1049	1048	1049	1049	1049	1050	1050	1050	1049	1046	1044	1038	1037	1037	1038	1042	1046	1052	1057	1062	1057	1052	1050	1049	1048
5	1049	1046	1044	1043	1031	1031	1038	1042	1044	1044	1039	1038	1043	1047	1051	1060	1060	1055	1056	1060	1066	1060	1055	1050	1048
6 d	1048	1034	1030	1033	1033	1037	1038	1034	1034	1033	1030	1035	1040	1054	1073	1093	1094	1078	1079	1066	1060	1056	1022	1019	1048
7	1036	1043	1046	1045	1044	1045	1043	1043	1040	1039	1040	1038	1042	1049	1051	1055	1067	1072	1060	1053	1054	1055	1050	1046	1048
8	1048	1046	1038	1030	1034	1034	1036	1036	1040	1046	1045	1042	1043	1042	1044	1049	1057	1057	1054	1051	1051	1051	1051	1050	1045
9	1050	1050	1049	1046	1044	1044	1048	1046	1044	1048	1046	1044	1043	1046	1050	1052	1055	1055	1054	1052	1052	1049	1049	1049	1049
10	1049	1044	1043	1032	1037	1040	1042	1040	1038	1042	1039	1034	1035	1043	1048	1051	1056	1060	1060	1057	1055	1055	1048	1048	1046
11 d	1045	1040	1043	1043	1043	1043	1040	1042	1039	1037	1038	1036	1037	1043	1043	1040	1042	1060	1072	1078	1079	1067	1013	958	1043
12 d	943	965	1000	985	982	1013	1019	1007	1020	1042	1054	1066	1069	1076	1071	1071	1096	1082	1064	1066	1061	1039	1035	1036	*1036*
13	1010	1004	1016	1033	1042	1046	1048	1052	1053	1057	1055	1054	1049	1049	1050	1056	1073	1071	1078	1077	1069	1065	1048	1019	1049
14	1016	1010	1007	1013	1032	1039	1046	1051	1050	1051	1049	1046	1048	1054	1055	1070	1084	1093	1081	1048	1031	1034	1019	1006	1043
15	1002	1012	1027	1028	1009	1022	1039	1045	1046	1046	1048	1049	1049	1054	1073	1081	1090	1090	1085	1066	1058	1050	1046	1044	1048
16	1050	1039	1024	1025	1026	1020	1031	1042	1043	1046	1048	1042	1044	1049	1051	1056	1058	1074	1073	1066	1058	1042	1031	1014	1044
17 d	1018	1028	1037	1043	1048	1049	1049	1052	1054	1049	1057	1063	1058	1064	1072	1092	1097	1104	1088	1070	1067	1039	1004	1007	1055
18	1019	1022	1022	1032	1040	1054	1054	1055	1055	1055	1051	1049	1044	1044	1055	1063	1078	1079	1087	1070	1054	1034	1012	1010	1047
19	1015	1013	1015	1007	1019	1031	1031	1036	1040	1045	1048	1040	1037	1043	1055	1056	1072	1079	1073	1064	1063	1046	1037	1041	1042
20	1036	1029	1036	1039	1040	1036	1044	1049	1046	1044	1045	1043	1049	1046	1051	1061	1070	1072	1068	1055	1044	1046	1039	1008	1046
21 d	1019	1023	1002	1007	1014	1018	1028	1043	1045	1050	1044	1046	1055	1070	1061	1061	1084	1084	1074	1059	1058	1042	1038	1037	1044
22	1039	1037	1042	1042	1020	1020	1025	1037	1039	1036	1044	1049	1057	1058	1057	1057	1061	1072	1063	1059	1057	1046	1041	1014	1045
23	1024	1037	1043	1045	1046	1048	1049	1049	1048	1042	1036	1034	1039	1043	1050	1055	1051	1051	1050	1050	1051	1053	1054	1048	1046
24	1034	1042	1045	1045	1048	1049	1050	1049	1047	1048	1042	1037	1040	1043	1049	1055	1058	1055	1050	1051	1055	1053	1053	1051	1048
25 q	1050	1051	1050	1048	1048	1049	1049	1049	1046	1043	1041	1037	1041	1043	1043	1048	1052	1056	1055	1055	1055	1054	1051	1043	1048
26 q	1044	1045	1048	1049	1049	1049	1049	1049	1047	1044	1038	1028	1028	1036	1027	1056	1067	1077	1066	1058	1056	1054	1045	1047	1048
27	1049	1049	1050	1049	1049	1048	1048	1045	1044	1045	1045	1044	1045	1053	1057	1060	1057	1057	1054	1052	1055	1061	1049	1050	1051
28 q	1050	1047	1044	1045	1045	1048	1049	1049	1049	1045	1043	1043	1044	1045	1048	1052	1056	1055	1051	1051	1050	1056	1055	1049	1049
29 q	1045	1046	1046	1048	1048	1048	1050	1051	1049	1048	1041	1035	1033	1033	1042	1048	1052	1055	1057	1055	1051	1051	1050	1050	1047
30 q	1049	1049	1049	1049	1049	1049	1049	1050	1050	1045	1040	1033	1030	1032	1037	1044	1048	1051	1054	1057	1055	1052	1051	1048	1047
Mean	*1034*	1035	1036	1036	1037	1040	1043	1044	1044	1045	1043	1041	1043	1047	1052	1058	1066	*1069*	1066	1060	1057	1051	1041	1034	1047

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

137 ESKDALEMUIR — SEPTEMBER 1942

	TERRESTRIAL MAGNETIC ELEMENTS																3-hr. range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination					Vertical force									
	Maximum 16,000γ +		Minimum 16,000γ +		Range	Maximum 12° +		Minimum 12° +		Range	Maximum 44,000γ +		Minimum 44,000γ +		Range					
	h. m.	γ	γ	h. m.	γ	h. m.	′	′	h. m.	′	h. m.	γ	γ	h. m.	γ					°A.
1	16 17	547	472	11 2	75	15 18	*53·0*	33·4	8 42	19·6	18 42	1114	1026	11 59	88	1,1,1,3,3,3,3,2	17	1	87·4
2	22 8	554	460	6 39	94	7 9	47·6	29·8	23 24	17·8	21 10	1062	1019	22 14	43	3,2,4,3,2,2,3,4	23	1	87·4
3	18 32	534	472	10 47	62	12 50	47·3	32·3	7 46	15·0	17 31	1055	1035	11 25	20	2,2,2,2,2,2,1,1	14	0	87·5
4	15 2	545	483	9 32	62	13 44	48·5	30·5	19 13	18·0	19 10	1063	1036	12 16	27	2,1,2,3,2,3,2,1	16	0	87·5
5	4 19	550	478	11 25	72	13 9	46·1	31·8	20 12	14·3	20 20	1068	1025	4 30	43	1,3,2,2,3,3,2,2	18	1	87·6
6 d	22 14	588	464	14 19	124	14 3	49·4	26·1	22 56	23·3	15 47	1102	1003	23 3	99	3,2,3,3,4,4,3,5	27	1	87·5
7	22 31	548	487	16 23	61	13 12	44·1	31·4	22 25	12·7	17 0	1079	1028	0 1	51	2,2,2,2,2,3,1,3	17	1	87·6
8	15 40	542	492	11 44	*50*	12 10	42·3	33·3	0 31	*9·0*	17 30	1059	1026	3 30	33	3,2,2,2,2,3,2,1	17	0	87·7
9	14 36	536	483	11 27	53	14 36	43·7	34·2	7 43) 9 22)	9·5	17 20	1057	1041	12 10	*16*	1,2,2,2,2,2,2,1	14	0	87·7
10	1 23	545	487	10 9	58	13 27	46·7	33·5	6 37	13·2	18 0	1061	1029	3 44	32	2,3,2,2,3,2,2,2	18	0	87·8
11 d	22 58	*655*	453	24 0	202	13 35	52·2	25·9	22 5	26·3	19 52	1087	936	24 0	151	2,2,1,2,4,4,4,6	25	1	87·8
12 d	20 43	629	*378*	9 19	*251*	7 21	52·3	20·3	0 29	*32·0*	16 40	1103	*932*	0 43	*171*	4,4,5,5,4,4,5,4	34	2	87·8
13	22 31	597	467	9 8	130	14 39	47·7	24·2	19 38	23·5	18 54	1084	997	0 42	87	3,3,3,3,3,4,4,5	28	1	87·8
14	19 17	625	457	21 15	168	14 49	46·9	25·7	19 44	21·2	16 57	1098	985	23 56	113	3,3,3,3,3,4,5,4	28	1	87·9
15	20 28	573	460	10 41	113	13 20	45·9	26·1	18 11	19·8	17 45	1097	986	0 1	111	4,3,3,4,3,4,4,2	27	1	87·9
16	21 9	577	468	23 6	109	12 17	47·6	24·1	23 0	23·5	17 44	1081	998	23 43	83	3,3,3,2,3,3,3,5	25	1	87·9
17 d	17 58	593	389	10 53	204	13 38	49·2	20·7	17 40	28·5	17 35	*1123*	997	22 31	126	3,2,3,5,4,5,4,4	30	2	87·9
18	20 43	573	464	17 57	109	22 30	46·9	*20·0*	18 26	26·9	18 6	1096	999	22 50	97	3,2,2,3,4,4,4,4	26	1	87·9
19	21 26	568	461	10 44	107	12 31) 13 15)	47·7	27·5	17 16	20·2	17 28	1082	1002	3 20	80	3,3,3,4,4,4,3,3	27	1	88·0
20	23 25	566	448	12 14	118	14 9	47·1	27·9	19 32	19·2	16 29	1074	1001	23 21	73	3,2,2,4,4,4,3,4	26	1	87·9
21 d	18 30	617	410	9 32	207	12 20	49·3	22·4	18 29	26·9	16 47	1096	997	2 58	99	4,4,4,5,4,4,5,3	33	2	88·0
22	21 10	561	456	5 4	105	13 6	45·7	35·5	22 4	10·2	17 30	1074	1007	23 39	67	2,4,3,3,4,4,2,4	26	1	88·0
23	24 0	547	479	8 40	68	12 0	44·0	31·4	1 45	12·6	22 13	1055	1012	0 1	43	3,2,2,3,2,2,2,2	18	0	88·0
24	0 10	556	491	11 27	65	12 24	46·0	28·5	1 4	17·5	16 40	1060	1031	0 40	29	3,1,2,1,2,2,2,2	15	0	88·0
25 q	23 12	545	488	10 49	57	13 22	44·2	33·1	8 13	11·1	17 53	1058	1037	11 40	21	2,1,1,1,2,2,2,2	13	0	88·0
26 q	22 11	551	485	17 18	66	15 1	48·7	33·7	23 17	15·0	17 30	1080	1025	11 58	55	2,1,0,2,2,3,2,3	15	0	88·0
27	22 16	588	487	11 9	101	13 31	47·9	28·9	22 11	19·0	15 28	1063	1042	12 0	21	1,2,2,2,2,2,2,4	17	1	88·0
28 q	23 7	542	484	12 40	58	12 23	46·1	32·3	23 3	13·8	21 30	1057	1041	11 13	*16*	2,1,2,2,2,2,1,2	14	0	88·0
29 q	17 21	538	479	11 26	59	13 43	46·7	32·4	8 51	14·3	18 24	1058	1031	12 5	27	2,1,1,2,2,2,2,1	13	0	88·0
30 q	23 0	546	489	10 19	57	14 3	44·7	32·4	8 41	12·3	19 42	1060	1030	13 8	30	1,1,1,2,2,2,2,2	13	0	88·0
Mean	- -	568	466	- -	102	- -	47·2	29·0	- -	18·2	- -	1077	1012	- -	65	2·7	21·1	0·70	87·8

q denotes an international quiet day and d an international disturbed day.

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

138 ESKDALEMUIR (H) — 16,000γ (0·16 C.G.S. units) + — OCTOBER 1942

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1 q	526	526	523	526	526	527	526	522	512	503	500	502	510	514	523	523	527	528	530	531	533	535	531	539	523
2 d	531	522	522	534	543	554	554	550	531	491	507	515	495	483	488	573	503	503	476	499	542	491	495	506	517
3 d	511	483	478	480	506	504	495	483	491	495	480	476	489	472	503	515	507	515	526	507	490	494	539	526	499
4	508	492	504	510	492	504	518	495	493	500	491	502	488	503	513	509	517	525	500	502	501	510	514	522	505
5	488	499	502	504	518	510	504	510	495	492	476	471	491	491	506	493	498	519	518	520	512	515	519	515	503
6	515	517	516	515	515	516	517	514	499	497	491	492	498	504	510	513	515	519	524	523	514	527	521	519	512
7	531	511	502	516	527	529	513	529	526	506	499	494	496	490	492	502	515	511	508	511	511	513	527	519	512
8	514	517	513	513	521	527	527	525	518	498	492	491	494	498	514	517	522	518	495	498	511	521	523	525	512
9 q	516	514	523	522	521	515	533	531	525	510	505	510	515	524	521	530	529	534	531	532	534	534	530	531	524
10	531	529	531	534	537	539	538	542	534	521	508	517	522	531	534	543	539	538	538	534	534	521	524	525	*531*
11	523	522	522	523	524	526	524	520	515	503	503	502	506	520	530	527	530	540	542	554	511	515	524	531	522
12 d	527	527	502	511	526	522	522	519	511	499	441	483	481	511	516	503	510	530	518	515	518	522	554	550	513
13	510	503	504	499	511	510	510	510	507	487	488	498	506	499	504	499	511	526	499	512	522	553	551	507	509
14	506	494	507	511	510	511	516	513	501	497	491	487	471	490	506	513	514	518	510	549	524	474	478	500	504
15	509	505	503	509	480	503	533	514	507	493	498	498	496	503	498	503	517	509	518	518	502	529	533	510	508
16	505	482	509	506	514	513	516	518	506	499	491	498	493	498	510	507	497	517	545	506	541	521	518	528	510
17	513	512	514	518	514	514	522	522	506	498	498	505	510	515	518	514	514	525	523	522	514	535	518	515	515
18	515	516	514	513	510	514	518	509	507	498	499	491	505	509	513	512	498	510	493	509	518	522	514	533	510
19	498	482	525	502	502	510	490	508	503	498	478	490	478	491	510	521	487	529	517	510	514	510	518	518	504
20	515	513	514	513	514	514	521	517	513	498	498	498	494	509	479	503	480	506	518	522	514	516	515	518	508
21	518	518	518	518	518	521	525	525	510	506	502	502	502	492	516	513	498	511	517	518	519	512	516	518	513
22 q	521	518	511	511	517	524	521	517	507	498	499	499	495	509	514	518	522	525	525	519	521	520	525	523	515
23 q	522	517	517	520	524	528	522	515	506	493	500	501	510	513	520	520	524	521	525	525	526	525	525	529	518
24 q	527	524	524	524	525	525	524	520	512	501	502	505	513	517	521	521	529	532	532	533	533	529	524	528	522
25	528	527	520	532	548	549	544	532	548	529	518	509	509	510	511	513	521	524	522	521	521	520	517	520	525
26	518	517	525	520	518	525	528	528	524	509	504	502	505	509	510	517	521	525	528	529	538	551	515	524	520
27	536	535	520	520	525	524	526	532	525	506	502	504	509	514	522	517	517	525	528	529	525	536	529	525	522
28 d	525	528	528	528	532	532	536	532	527	511	496	508	509	510	509	579	505	544	568	450	427	413	446	392	506
29 d	517	485	482	479	482	474	444	407	474	470	419	399	451	469	479	501	467	470	503	524	471	476	506	497	*473*
30	463	481	472	501	510	489	494	511	489	458	450	467	469	485	485	489	496	477	506	505	517	549	528	521	492
31	493	497	500	509	505	509	507	501	501	490	473	442	469	474	508	505	488	490	536	502	509	509	517	513	498
Mean	515	510	511	514	517	518	518	515	510	499	*490*	492	496	502	509	517	510	518	*520*	517	515	516	519	517	511

MAGNETIC DECLINATION (WEST)

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

139 ESKDALEMUIR (D) — 12° + — OCTOBER 1942

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1 q	36·9	36·9	36·8	36·8	37·1	37·1	36·2	35·3	35·0	35·3	37·3	39·8	41·6	41·6	41·5	41·3	39·8	39·6	39·1	38·8	37·4	35·9	36·5	33·5	37·8
2 d	32·1	33·6	35·1	34·9	35·9	35·4	35·5	35·4	35·3	37·1	40·0	44·2	49·9	54·7	52·5	45·1	42·3	31·0	36·0	29·7	31·9	31·1	34·1	36·7	37·9
3 d	44·9	38·8	40·0	32·4	40·7	38·7	44·2	43·4	43·2	40·0	39·8	40·7	41·7	42·9	42·5	33·1	35·4	29·1	26·8	31·5	31·1	34·2	36·7	39·1	38·0
4	33·1	38·6	38·0	34·2	35·4	40·0	41·5	37·8	36·3	39·4	39·5	40·4	41·7	39·0	40·4	38·9	32·1	33·5	36·3	33·7	34·5	35·8	36·6	31·5	37·0
5	35·3	37·7	36·3	39·6	37·0	36·8	34·8	37·8	37·5	37·8	40·2	42·9	44·7	43·1	36·7	41·1	37·8	35·6	38·1	37·8	32·2	34·5	35·9	37·2	37·9
6	37·8	36·7	36·2	35·9	36·6	36·8	36·9	36·7	36·0	36·8	38·6	40·1	41·0	40·9	40·1	39·0	37·9	37·8	37·5	37·7	35·9	34·4	35·7	34·9	37·4
7	34·9	33·0	37·6	34·1	34·0	34·1	38·3	38·6	36·7	36·6	37·3	40·0	42·3	44·8	43·1	36·9	39·8	39·4	38·7	35·4	34·4	34·2	31·1	30·2	36·9
8	36·3	37·0	37·8	39·6	37·5	36·8	36·2	35·5	35·6	36·7	39·5	43·0	44·6	44·0	42·7	41·7	40·2	39·4	33·8	34·2	35·7	34·9	35·9	35·5	38·1
9 q	36·0	39·5	35·0	35·8	35·9	36·8	37·1	35·7	35·1	35·9	38·6	41·6	42·9	44·6	44·3	43·5	42·4	41·0	39·4	37·6	37·0	36·6	36·4	36·8	*38·6*
10	36·7	37·0	36·8	36·7	36·8	36·7	36·2	35·4	34·8	34·6	36·1	39·4	41·4	42·8	43·0	41·7	40·4	39·7	39·3	38·3	38·3	34·5	33·9	34·5	37·7
11	36·1	36·1	36·8	36·9	37·2	36·8	36·6	35·7	34·6	34·1	35·9	40·5	42·7	44·1	44·5	44·5	42·4	42·5	39·9	41·4	36·5	29·8	35·0	37·5	38·3
12 d	36·9	36·7	39·6	36·7	38·0	36·3	34·4	34·4	33·7	36·8	36·9	41·3	44·1	43·5	46·2	45·6	42·2	33·3	33·8	38·7	38·1	36·2	33·3	30·6	37·8
13	28·7	35·8	36·8	35·5	36·1	36·9	36·8	35·2	35·1	34·6	35·5	40·2	42·4	44·0	45·8	40·6	40·4	16·2	38·0	39·8	36·3	31·5	34·7	32·7	36·2
14	33·7	38·0	41·4	37·7	37·9	37·7	38·6	36·8	35·5	36·8	38·2	40·7	43·1	40·6	42·9	30·6	40·5	40·7	34·1	23·7	22·5	24·3	31·5	38·6	36·1
15	39·5	37·8	41·3	36·1	41·9	41·4	40·7	35·2	35·4	34·1	37·4	41·5	42·7	44·3	44·0	41·6	38·9	35·7	18·8	28·0	33·7	35·5	38·6	31·0	37·3
16	29·6	39·2	33·7	33·7	35·9	35·4	36·3	36·9	35·8	36·8	39·5	41·1	43·1	38·8	40·9	39·1	37·4	38·7	29·8	35·0	35·3	34·6	35·5	36·2	36·6
17	39·9	37·9	36·5	35·4	37·7	38·8	36·7	36·8	35·0	35·9	38·5	41·5	43·2	42·6	41·4	40·7	37·7	37·1	38·7	28·2	28·8	31·5	35·8	36·1	37·2
18	38·0	37·8	38·2	37·3	36·5	35·1	35·7	35·9	37·1	36·2	38·0	40·0	41·7	41·8	41·6	40·7	34·9	29·3	28·5	35·5	37·1	33·4	34·9	37·6	36·8
19	38·8	46·1	30·6	32·6	37·7	35·9	37·8	38·0	38·6	37·2	40·9	44·3	44·2	41·6	45·0	35·1	38·5	26·9	31·4	37·9	35·5	34·3	36·1	36·2	37·5
20	37·8	39·7	36·2	37·8	35·9	35·2	35·8	35·8	35·4	35·2	38·9	40·5	39·0	41·6	32·7	28·9	35·8	35·2	34·1	35·3	36·8	36·6	36·8	37·0	36·4
21	36·9	36·9	36·7	36·7	36·7	36·5	35·8	35·1	34·3	35·4	37·7	40·3	42·2	41·3	39·6	42·0	33·5	38·7	38·5	37·3	36·6	35·5	35·5	36·6	37·3
22 q	37·9	36·9	36·0	36·3	36·6	36·1	35·8	35·0	34·4	36·3	39·6	41·6	42·2	40·4	39·6	38·7	37·9	37·9	36·9	36·8	35·9	35·2	35·1	35·6	37·3
23 q	35·3	35·2	36·1	36·8	36·4	36·0	35·9	35·9	35·9	37·4	40·7	43·2	45·2	43·9	40·7	39·5	38·8	39·4	38·9	37·8	37·1	36·1	35·9	35·1	38·1
24 q	36·6	36·0	36·2	35·9	35·8	35·9	35·9	35·0	34·4	34·5	36·9	39·7	41·3	41·3	40·4	38·7	38·1	38·2	37·8	37·6	37·1	35·7	35·5	35·9	37·1
25	36·1	36·6	38·1	38·0	37·2	39·5	41·5	40·8	37·8	35·2	36·6	39·9	41·6	41·9	42·7	42·4	39·6	38·6	38·0	37·0	36·8	35·9	34·3	34·1	38·3
26	34·5	36·0	37·9	34·9	35·1	36·2	35·8	35·7	34·3	33·6	35·6	38·7	40·4	40·5	39·8	39·5	38·7	38·1	37·9	37·8	31·0	31·4	34·4	35·9	36·4
27	39·0	40·3	36·0	35·8	35·2	36·2	36·0	35·3	34·3	34·2	36·2	39·0	40·4	40·4	40·6	39·0	37·5	38·3	38·7	38·0	37·8	33·7	34·4	36·2	37·2
28 d	36·1	36·6	36·0	36·8	36·8	36·7	35·9	35·1	34·3	34·6	38·0	41·9	45·2	48·8	52·2	46·1	39·1	48·3	48·6	26·1	26·3	9·5	9·2	21·1	35·8
29 d	21·8	34·2	36·0	37·0	39·6	41·6	40·7	59·3	49·5	38·7	38·3	40·4	44·1	42·3	41·5	38·2	35·7	29·6	25·7	15·3	19·0	27·5	28·5	30·5	35·6
30	30·2	38·7	45·0	40·6	37·8	39·6	39·6	38·1	37·0	35·3	38·6	40·9	42·5	38·0	40·5	35·9	30·8	25·2	29·5	30·6	32·3	34·3	35·5	32·7	36·2
31	29·7	35·1	38·0	37·8	36·2	37·0	35·2	35·2	34·3	34·6	38·9	38·9	40·6	44·0	32·5	36·9	36·0	32·4	24·4	33·6	32·4	37·0	36·4	35·8	*35·5*
Mean	35·4	37·3	37·2	36·3	36·9	37·1	37·2	37·2	36·2	36·1	38·2	40·9	42·7	*42·7*	42·0	39·6	38·1	35·7	35·1	34·4	33·9	*33·1*	34·2	34·6	37·2

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

140 ESKDALEMUIR (V) — 44,000γ (0·44 C.G.S. unit) + — OCTOBER 1942

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1 q	1049	1049	1050	1049	1049	1050	1051	1054	1053	1050	1046	1043	1043	1045	1045	1049	1051	1051	1050	1050	1050	1050	1049	1043	1049
2 d	1039	1040	1043	1040	1041	1038	1038	1039	1044	1046	1039	1037	1042	1060	1076	1168	1145	1151	1145	1123	1043	1048	1049	1037	1065
3 d	1007	972	971	971	930	989	1013	1023	1027	1041	1048	1055	1063	1073	1078	1116	1125	1115	1081	1063	1067	1052	1028	1013	*1038*
4	1014	1016	1024	1038	1042	1033	1031	1039	1043	1044	1047	1050	1061	1080	1085	1103	1126	1095	1084	1081	1075	1062	1031	1015	1055
5	1024	1021	1029	1016	1032	1037	1047	1045	1048	1054	1058	1063	1064	1072	1093	1084	1076	1074	1063	1060	1063	1063	1055	1048	1054
6	1037	1043	1049	1053	1055	1055	1056	1060	1062	1060	1056	1054	1050	1051	1054	1056	1056	1055	1055	1057	1062	1051	1049	1049	1054
7	1042	1018	1003	1024	1036	1039	1043	1043	1045	1047	1046	1049	1050	1061	1068	1084	1076	1069	1071	1073	1074	1069	1057	1049	1051
8	1049	1051	1050	1048	1048	1049	1051	1052	1052	1052	1049	1049	1050	1055	1059	1061	1063	1067	1079	1083	1073	1066	1060	1057	1057
9 q	1052	1039	1042	1047	1050	1052	1048	1048	1049	1049	1045	1044	1043	1048	1052	1055	1056	1055	1054	1055	1054	1054	1054	1054	1050
10	1051	1052	1051	1050	1049	1049	1048	1045	1045	1045	1046	1042	1043	1043	1045	1049	1049	1048	1049	1050	1051	1060	1058	1055	1049
11	1052	1054	1053	1052	1051	1051	1051	1051	1050	1047	1042	1039	1039	1040	1048	1055	1057	1051	1051	1049	1078	1078	1066	1058	1053
12 d	1051	1039	1024	1015	1025	1038	1046	1047	1047	1043	1048	1050	1067	1066	1063	1073	1081	1080	1067	1061	1058	1061	1044	1024	1051
13	1031	1023	1006	1022	1038	1049	1051	1051	1049	1050	1046	1046	1048	1055	1066	1076	1086	1108	1076	1064	1060	1042	1018	1022	1049
14	1040	1044	1045	1045	1053	1055	1054	1054	1055	1055	1055	1056	1064	1070	1081	1113	1082	1069	1076	1066	1045	1028	1040	1040	1058
15	1046	1049	1051	1051	1042	1029	1034	1048	1052	1058	1054	1051	1053	1058	1069	1078	1082	1085	1085	1072	1070	1054	1019	1030	1055
16	1042	1019	1026	1048	1055	1056	1058	1057	1057	1055	1055	1055	1062	1078	1070	1079	1085	1081	1072	1070	1055	1057	1061	1055	1059
17	1045	1048	1051	1056	1052	1044	1050	1052	1057	1054	1052	1051	1054	1058	1065	1070	1073	1069	1064	1065	1072	1057	1054	1057	1057
18	1056	1057	1049	1049	1050	1054	1058	1061	1061	1059	1057	1058	1062	1066	1072	1084	1094	1097	1098	1087	1070	1061	1062	1053	1066
19	1014	991	1015	1033	1038	1045	1051	1056	1060	1058	1055	1060	1075	1091	1099	1132	1109	1097	1079	1073	1072	1073	1069	1066	1063
20	1062	1049	1055	1055	1052	1055	1057	1058	1061	1063	1061	1063	1070	1076	1100	1112	1121	1094	1076	1068	1067	1066	1066	1063	1070
21	1063	1063	1063	1062	1062	1061	1061	1062	1063	1062	1061	1061	1064	1069	1072	1079	1091	1079	1073	1068	1066	1069	1067	1066	1067
22 q	1062	1061	1062	1062	1062	1062	1063	1064	1068	1068	1063	1063	1067	1067	1069	1069	1067	1064	1064	1066	1067	1068	1067	1066	1065
23 q	1063	1063	1063	1062	1062	1061	1062	1062	1063	1061	1056	1057	1060	1061	1064	1067	1066	1064	1064	1063	1063	1064	1063	1062	1062
24 q	1062	1061	1060	1058	1058	1058	1060	1060	1058	1057	1051	1052	1054	1056	1060	1061	1061	1057	1057	1057	1058	1061	1062	1061	1058
25	1060	1059	1056	1049	1039	1036	1032	1034	1031	1034	1037	1037	1044	1051	1056	1062	1061	1061	1063	1063	1063	1062	1063	1062	1051
26	1061	1058	1049	1048	1049	1046	1047	1049	1051	1052	1051	1050	1052	1055	1060	1062	1061	1061	1059	1059	1059	1048	1051	1051	1054
27	1036	1027	1032	1043	1048	1051	1052	1052	1055	1055	1052	1051	1051	1054	1059	1063	1063	1061	1057	1057	1057	1060	1057	1056	1052
28 d	1056	1056	1057	1056	1055	1055	1054	1054	1055	1056	1054	1048	1054	1064	1087	1193	1230	1284	1359	1223	1135	1006	1007	939	*1093*
29 d	985	1024	1033	1021	1035	1034	1049	1038	1031	1059	1083	1121	1139	1112	1103	1100	1134	1162	1114	1081	1054	1006	996	1003	1063
30	1006	1013	1006	1012	1031	1037	1048	1056	1063	1078	1079	1078	1088	1107	1118	1150	1139	1124	1099	1081	1072	1038	1025	1033	1066
31	1036	1027	1036	1035	1050	1054	1055	1064	1070	1074	1075	1085	1091	1097	1115	1104	1106	1099	1085	1073	1073	1060	1049	1061	1070
Mean	1042	*1038*	1039	1041	1043	1046	1049	1051	1052	1054	1054	1055	1060	1066	1073	1087	*1089*	1088	1083	1073	1065	1055	1048	1043	1058

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

141 ESKDALEMUIR — OCTOBER 1942

	TERRESTRIAL MAGNETIC ELEMENTS												3-hr. range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination			Vertical force							
	Maximum 16,000γ +		Minimum 16,000γ +		Range	Maximum 12° +		Minimum 12° +		Range	Maximum 44,000γ +		Minimum 44,000γ +		Range				
	h. m.	γ	γ	h. m.	γ	h. m.	′	′	h. m.	′	′	h. m.	γ	γ	h. m.	γ				°A.
1 q	23 0	549	499	10 36	50	13 10	42·2	31·6	23 59	10·6	7 56	1055	1043	12 22	12	1,1,1,1,1,2,1,2	10	0	88·0
2 d	15 28	726	404	20 53	332	13 51	58·3	8·1	19 52	50·2	15 35	1265	1006	20 46	259	3,2,2,4,5,6,6,4	32	2	88·1
3 d	15 43) 17 19)	561	441	13 29	120	0 53	55·2	19·5	18 29	35·7	17 7	1138	908	4 18	230	4,4,4,3,4,4,4,4	31	2	88·0
4	17 5	570	449	12 39	121	6 6	44·8	21·5	16 36	23·3	16 35	1148	1007	0 1	141	3,3,3,3,4,4,3,4	27	1	88·0
5	4 49	531	456	13 56	75	3 9	46·8	28·0	20 29	18·8	14 37	1096	1007	3 28	89	3,3,3,3,4,3,3,2	24	1	88·0
6	21 37	542	487	10 21	55	12 37	41·4	32·3	21 36	9·1	21 7	1066	1034	0 28	32	2,1,2,2,1,1,2,3	14	0	88·1
7	1 3	562	468	14 59	94	13 22	46·1	25·9	22 47	20·2	15 40	1086	995	2 20	91	4,2,3,2,3,3,2,3	22	1	88·1
8	23 12	531	481	18 40	50	13 1	45·9	26·6	18 57	19·3	18 52	1087	1015	4 0	72	2,2,1,1,2,2,3,2	15	1	88·1
9 q	18 17	539	500	1 7	*39*	13 34	46·3	34·4	7 54	11·9	16 0	1057	1033	1 52	24	3,2,2,1,2,2,2,1	15	0	88·0
10	14 14	552	503	10 12	49	14 14	44·9	31·3	22 52	13·6	21 50	1063	1040	11 51	23	1,1,2,2,3,3,2,2	16	1	87·8
11	19 42	577	492	20 41	85	15 7	45·8	28·7	21 41	17·1	20 52	1091	1037	11 50	54	1,1,1,2,2,2,4,3	16	1	87·8
12 d	17 54	588	398	10 46	190	12 30	48·5	24·5	23 42	24·0	17 32	1088	1007	2 52	81	3,3,3,5,5,4,4,4	31	1	87·5
13	21 57	570	468	17 4	102	12 50	49·1	8·2	17 23	40·9	17 19	1121	1001	2 36	120	4,3,2,3,4,5,3,4	28	1	87·4
14	19 24	576	444	12 33	132	14 41	48·1	18·9	19 17	29·2	15 11	1126	1023	21 27	103	4,2,2,3,4,4,4,4	27	1	87·3
15	22 3	588	466	4 52	122	13 13	46·4	14·5	18 47	31·9	18 10	1090	1014	22 53	76	2,3,3,3,3,3,4,4	25	1	87·2
16	18 22	577	452	13 8	125	12 20	45·1	19·1	18 16	26·0	16 4	1089	1001	1 44	88	4,2,2,2,4,3,5,2	24	1	87·1
17	20 58	545	491	9 50	54	12 58	44·2	26·4	20 53	17·8	20 30	1074	1039	0 47	35	3,3,2,2,2,2,3,3	20	1	87·0
18	20 0	576	447	16 51	129	15 2	44·5	21·8	17 3	22·7	17 9	1103	1037	24 0	66	1,2,2,3,3,4,4,3	22	1	87·0
19	17 16	576	451	1 19	125	1 24	50·4	15·3	17 11	35·1	15 21	1145	985	1 34	160	4,3,3,3,3,5,3,2	26	1	86·9
20	11 44	541	452	14 17	89	11 48	44·9	23·9	15 11	21·0	16 34	1126	1046	1 42	80	3,2,1,3,4,4,3,1	21	1	86·9
21	14 59	530	467	16 1	63	13 12	43·2	30·8	16 30	12·4	16 17	1097	1060	10 18	37	0,1,2,1,3,4,1,2	14	0	87·0
22 q	18 43	530	490	12 41	40	12 38	43·1	33·7	8 2	9·4	15 27	1069	1059	1 21	*10*	1,2,1,2,2,1,2,1	12	0	87·0
23 q	23 24	536	490	9 24	46	12 21	45·8	34·4	23 42	11·4	16 2	1069	1055	10 55	14	2,1,1,2,2,2,2,2	14	0	87·0
24 q	21 27	543	498	9 56	45	12 27	41·6	34·1	8 4	7·5	22 10	1063	1051	10 40	12	1,1,0,1,2,2,1,2	10	0	86·8
25	5 53	559	486	12 49	73	13 1	47·3	32·6	23 15	14·7	19 5	1066	1028	8 20	38	2,3,3,2,4,2,2,1	19	1	86·7
26	21 11	589	497	12 4	92	11 51	41·4	26·2	21 4	15·2	15 20	1063	1044	5 50	19	2,2,2,2,2,1,3,4	18	1	86·7
27	0 11	563	497	10 19	66	0 52	41·4	32·6	21 36	8·8	16 0	1066	1025	1 23	41	3,2,2,1,2,2,1,2	15	0	86·6
28 d	15 51	*735*	*212*	20 58	*523*	18 9	*69·7*	*-3·6*	21 9	*73·3*	18 28	*1421*	*849*	23 43	*572*	1,1,1,2,4,6,7,7	29	2	86·5
29 d	19 29	600	325	7 25	275	7 33	65·8	0·2	0 1	65·6	17 2	1170	950	0 1	220	5,3,6,5,3,4,6,6	38	2	86·4
30	21 32	573	435	10 22	138	2 46	46·8	11·7	18 0	35·1	15 53	1178	1001	0 34	177	4,3,4,3,4,5,5,4	32	2	86·4
31	18 21	572	427	11 1	145	13 40	46·8	15·3	18 14	31·5	14 41	1117	1025	1 29	92	3,2,3,4,4,3,4,3	26	1	86·2
Mean		571	454		117		47·5	22·9		24·6		1113	1014		99	2·7	21·7	0·90	87·3

q denotes an international quiet day and d an international disturbed day.

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

142 ESKDALEMUIR (H) — 16,000γ (0·16 C.G.S. unit) + — NOVEMBER 1942

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	511	513	513	514	509	522	518	509	490	505	493	489	501	494	504	509	505	516	513	517	513	514	520	520	509
2	522	522	508	510	512	525	522	522	517	495	481	481	483	491	497	486	503	493	492	522	521	509	517	517	506
3	511	502	506	514	525	525	517	517	517	506	499	495	493	489	497	498	501	497	501	502	528	509	513	509	507
4	513	514	516	517	521	529	536	502	508	508	498	473	493	497	505	513	517	521	523	522	525	520	514	532	513
5	522	521	518	522	528	528	529	525	517	506	498	501	502	502	504	513	520	525	540	536	536	527	516	510	519
6	498	506	513	520	520	525	524	522	517	505	505	508	509	513	517	517	516	521	525	528	527	520	518	524	517
7	524	517	520	523	527	522	537	535	526	512	509	505	498	501	511	516	523	527	528	527	519	521	524	523	520
8	527	525	523	527	532	534	531	532	525	499	507	510	509	498	527	529	528	528	527	527	500	511	516	516	520
9 q	530	509	508	513	516	519	518	516	510	504	503	508	512	521	520	523	517	527	524	522	525	520	523	521	517
10	524	524	520	521	520	524	531	531	528	528	528	527	528	523	493	523	521	515	523	523	517	547	515	523	523
11	510	523	523	519	524	523	521	521	520	519	516	519	501	527	523	523	523	527	511	527	515	519	523	519	520
12	521	524	516	503	523	527	516	523	519	513	504	504	508	515	508	524	523	524	520	524	519	516	531	535	518
13	523	508	508	519	524	531	535	535	524	523	516	509	521	521	496	497	515	515	508	516	511	513	521	516	517
14	520	512	508	508	515	517	523	527	511	507	500	502	504	513	516	519	527	520	527	518	534	508	512	531	516
15	516	518	505	516	523	524	524	527	523	516	511	509	513	520	514	508	515	516	524	543	519	520	524	541	520
16 q	529	512	513	520	523	524	528	527	524	512	508	512	516	520	523	524	527	528	524	519	523	524	527	528	521
17 q	526	521	523	524	528	528	527	528	524	521	516	512	500	513	512	511	505	510	510	508	509	517	515	508	517
18	510	500	514	518	523	525	527	524	527	510	523	520	520	524	523	512	528	531	528	510	508	520	521	522	519
19 q	521	523	524	526	528	528	529	535	535	529	520	509	521	526	528	530	528	527	531	526	530	531	532	527	*527*
20	527	521	526	536	527	543	546	546	544	544	531	514	524	523	517	520	516	509	476	501	511	515	505	505	522
21	508	512	512	516	519	514	508	523	524	519	516	504	515	520	520	516	524	520	521	516	519	516	519	516	517
22 q	516	516	515	518	519	518	519	519	515	511	515	511	515	518	518	520	523	523	524	520	527	534	522	524	519
23 d	526	526	529	535	536	537	538	537	538	530	523	518	503	500	507	480	487	508	518	518	504	526	472	480	516
24 d	415	507	502	495	553	502	471	440	421	428	464	491	475	475	492	495	504	487	472	488	471	494	503	499	*481*
25 d	515	499	515	500	503	512	509	503	491	488	464	471	485	475	491	471	506	502	502	519	504	522	505	504	498
26 d	503	508	512	496	515	507	506	510	494	473	470	483	488	485	483	495	498	508	506	518	522	492	526	515	501
27	496	503	503	511	514	512	514	518	510	471	493	488	494	503	499	509	511	512	515	495	489	514	504	514	504
28 d	498	500	495	505	505	522	530	511	506	500	479	475	479	502	491	504	495	487	481	483	498	499	515	486	498
29	491	488	502	500	509	508	511	509	511	494	487	499	483	491	497	489	505	487	496	507	514	508	502	519	500
30	506	507	510	515	522	530	523	518	507	506	503	507	507	499	498	506	503	504	500	495	504	511	514	514	509
Mean	512	513	513	515	521	*523*	522	520	514	506	503	*502*	503	507	508	509	514	514	513	516	515	517	516	517	513

MAGNETIC DECLINATION (WEST)

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

143 ESKDALEMUIR (D) — 12° + — NOVEMBER 1942

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	38·9	36·9	38·2	37·1	36·9	37·8	38·1	37·9	37·7	38·0	38·6	38·2	39·9	41·1	39·5	39·1	35·2	35·7	36·2	36·8	35·8	33·0	34·3	34·3	37·3
2	36·8	33·1	37·9	36·3	36·1	36·9	36·0	36·0	35·9	36·2	38·7	41·9	43·4	44·9	45·5	36·1	36·1	39·8	32·7	35·7	34·9	33·7	34·6	34·0	37·2
3	34·9	34·6	36·2	36·2	35·5	35·5	36·0	36·8	36·7	37·4	38·8	40·4	41·3	42·4	39·9	40·3	38·7	35·3	36·2	35·2	30·5	32·0	32·5	32·7	36·5
4	35·3	37·2	36·1	36·0	36·9	36·2	36·8	36·9	38·8	37·9	39·2	41·7	43·1	41·8	40·5	38·9	37·7	37·8	37·1	36·0	34·1	35·9	34·6	33·6	37·5
5	35·1	34·8	35·0	34·2	34·6	35·2	35·3	35·0	34·9	35·1	36·7	40·0	40·8	40·9	40·1	38·7	38·1	37·7	38·4	37·9	37·1	35·8	33·4	30·6	36·5
6	33·2	35·1	36·1	34·2	35·3	35·2	35·1	35·0	35·1	36·0	37·7	40·1	40·9	40·6	40·4	39·5	38·6	38·0	37·0	37·0	36·8	35·1	32·5	36·0	36·7
7	36·1	39·3	38·8	36·1	35·0	36·3	37·7	35·9	35·4	36·2	37·8	40·4	41·2	41·5	44·2	40·7	39·8	38·6	38·1	38·3	36·3	35·3	35·2	34·3	*37·9*
8	34·4	34·0	34·4	35·9	34·3	35·1	35·4	35·2	35·2	36·3	39·6	40·6	43·2	42·1	40·2	40·6	40·4	39·8	38·8	37·9	27·5	32·6	36·0	34·9	36·9
9 q	35·0	34·1	35·2	35·5	35·7	35·3	35·4	35·2	35·1	35·3	37·5	38·9	39·1	39·0	38·9	38·6	38·3	36·8	38·6	37·2	36·1	34·8	35·0	35·5	36·5
10	35·5	35·4	35·0	35·9	36·0	36·1	36·1	35·4	34·7	34·5	36·2	38·7	39·9	41·4	41·6	40·1	41·6	40·4	38·2	37·6	36·0	34·3	33·7	33·2	37·0
11	29·0	33·3	34·3	33·4	34·1	35·9	35·3	35·2	34·4	35·0	35·9	38·6	40·1	37·1	38·8	39·0	38·6	38·7	36·8	26·3	33·9	34·1	33·3	34·9	35·3
12	35·1	34·1	35·2	37·9	37·8	37·7	36·9	37·0	36·1	35·9	36·1	37·8	39·3	39·5	36·6	36·7	37·9	37·7	34·5	33·5	34·1	33·6	34·2	35·8	36·3
13	33·4	32·1	33·9	35·7	35·9	36·0	35·9	36·1	34·9	35·8	36·8	37·9	39·4	42·5	44·1	41·4	40·4	39·6	38·0	35·8	33·3	32·6	34·2	34·2	36·7
14	35·0	35·6	35·4	35·7	35·9	36·0	37·7	36·9	35·0	35·1	38·6	38·3	38·6	39·7	39·5	38·9	38·6	37·7	28·9	36·5	36·3	35·1	32·0	35·9	36·4
15	38·9	37·8	36·7	37·9	36·7	36·0	35·4	35·5	35·5	35·8	37·6	38·9	39·6	39·8	39·1	37·6	37·5	37·7	35·9	33·3	32·4	34·0	33·2	34·3	36·5
16 q	35·0	35·5	35·9	36·1	35·4	36·0	35·8	35·7	35·4	35·3	36·9	37·9	38·8	38·8	37·7	36·9	36·8	36·8	36·8	35·2	34·2	34·5	35·4	36·1	36·2
17 q	35·9	36·8	36·9	36·2	36·9	35·9	35·9	36·5	36·7	37·8	39·0	39·9	40·5	40·4	40·3	40·3	40·5	38·1	37·1	36·3	34·9	35·2	35·2	32·9	37·3
18	29·1	31·9	34·2	34·4	34·9	35·1	35·8	37·0	38·1	38·9	38·8	39·5	39·1	38·9	38·9	37·9	37·8	37·7	37·3	35·1	31·2	35·6	35·3	35·4	36·2
19 q	36·1	36·8	36·8	36·8	36·6	36·2	36·5	37·0	36·3	36·0	37·7	38·9	39·1	38·8	38·8	38·6	38·6	36·2	37·7	35·7	34·4	36·0	36·0	35·3	37·0
20	35·9	34·9	37·4	36·8	38·6	37·0	35·4	35·8	36·5	37·0	38·1	39·4	42·8	41·8	41·7	41·6	40·8	41·2	28·0	34·9	35·4	34·6	32·2	28·8	36·9
21	33·2	35·4	36·0	36·1	34·7	35·3	38·2	36·4	36·4	36·1	37·8	38·5	38·0	39·4	38·8	38·0	37·9	38·0	37·1	36·8	31·0	30·4	33·7	34·3	36·1
22 q	36·1	36·9	36·4	36·7	36·1	35·9	35·5	35·5	35·9	35·9	36·2	37·7	38·0	38·8	37·9	37·0	37·0	35·5	34·3	36·0	35·2	34·4	35·3	35·9	36·3
23 d	36·1	36·9	36·7	36·8	36·2	37·1	37·7	37·1	37·4	37·6	37·9	39·5	40·5	43·2	42·5	37·3	38·0	37·5	36·0	35·9	31·3	25·8	19·8	17·1	35·5
24 d	16·5	27·9	24·0	32·8	47·0	44·2	41·6	47·8	43·6	39·6	39·8	39·2	39·6	35·9	38·1	35·6	36·0	31·9	25·1	23·9	29·7	34·0	34·9	33·4	35·1
25 d	33·2	35·0	31·4	34·2	40·6	38·8	37·8	35·9	37·0	35·5	37·0	37·8	40·7	39·8	38·2	31·5	33·7	37·1	34·4	27·8	32·6	32·4	29·7	33·5	35·2
26 d	33·6	37·4	41·7	44·8	34·8	34·1	34·5	36·1	36·8	37·3	36·0	37·8	41·5	32·8	35·3	37·6	34·0	25·9	36·6	30·5	25·2	33·0	29·8	31·1	34·9
27	34·0	35·2	37·9	38·7	37·9	38·0	37·0	39·8	39·5	38·5	41·0	40·6	39·9	39·4	36·1	35·9	36·6	35·4	35·5	31·7	27·1	29·5	29·9	28·8	36·0
28 d	31·5	32·8	32·9	34·0	32·3	33·6	36·4	36·3	37·3	36·7	37·8	38·9	39·4	38·8	38·2	38·4	28·6	23·4	25·2	30·4	34·5	34·2	21·4	22·1	*33·1*
29	29·7	29·1	34·3	36·8	37·0	36·7	36·0	36·8	37·4	36·6	36·4	40·2	41·7	39·6	40·0	34·3	31·3	31·7	32·7	35·9	35·1	34·3	33·4	29·8	35·3
30	33·7	35·3	36·1	36·8	37·1	35·6	35·9	36·1	36·1	36·8	37·0	38·0	40·3	40·5	39·5	38·0	36·6	35·4	34·1	33·6	34·2	35·2	34·2	35·4	36·3
Mean	33·9	34·8	35·6	36·2	36·4	36·4	36·4	36·7	36·5	36·5	37·8	39·2	*40·3*	40·0	39·7	38·2	37·4	36·4	35·1	34·5	33·4	33·7	32·8	*32·8*	36·3

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

144 ESKDALEMUIR (V) — 44,000γ (0·44 C.G.S. unit) + — NOVEMBER 1942

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	1055	1055	1057	1061	1062	1058	1058	1061	1066	1064	1066	1070	1070	1078	1076	1081	1080	1076	1073	1071	1072	1073	1070	1066	1067
2	1057	1052	1053	1054	1055	1055	1057	1058	1060	1064	1067	1068	1069	1074	1084	1109	1105	1098	1108	1085	1063	1067	1067	1055	1070
3	1055	1061	1062	1063	1062	1062	1062	1062	1063	1063	1063	1066	1072	1080	1087	1090	1091	1097	1090	1086	1076	1073	1069	1066	1072
4	1064	1064	1065	1066	1064	1063	1061	1063	1062	1062	1061	1069	1062	1066	1068	1069	1073	1069	1069	1068	1069	1068	1069	1060	1066
5	1055	1053	1056	1061	1062	1062	1062	1063	1066	1063	1061	1061	1062	1063	1067	1067	1064	1064	1061	1061	1062	1065	1075	1069	1063
6	1070	1067	1056	1054	1060	1062	1062	1062	1062	1063	1062	1063	1063	1066	1069	1072	1072	1068	1065	1064	1064	1068	1070	1064	1065
7	1062	1060	1055	1057	1058	1058	1052	1053	1055	1056	1060	1063	1069	1075	1075	1078	1072	1069	1067	1068	1073	1076	1074	1073	1065
8	1071	1065	1062	1059	1056	1055	1055	1052	1053	1058	1056	1057	1061	1069	1071	1068	1065	1063	1064	1056	1088	1079	1070	1068	1064
9 q	1055	1055	1060	1062	1062	1062	1062	1062	1063	1064	1063	1063	1066	1068	1069	1057	1067	1067	1063	1066	1065	1068	1067	1065	1064
10	1062	1062	1062	1062	1062	1061	1057	1055	1055	1057	1055	1055	1056	1066	1073	1072	1069	1072	1073	1070	1070	1057	1053	1055	1062
11	1057	1050	1049	1051	1054	1055	1057	1057	1060	1059	1058	1059	1066	1068	1067	1068	1066	1063	1072	1074	1066	1063	1061	1050	1060
12	1050	1051	1056	1056	1056	1057	1060	1061	1059	1059	1057	1057	1057	1062	1069	1069	1067	1066	1068	1067	1066	1063	1058	1042	1060
13	1040	1045	1051	1055	1057	1056	1055	1055	1056	1057	1056	1056	1056	1060	1073	1086	1079	1078	1084	1081	1079	1072	1068	1057	1063
14	1051	1054	1057	1061	1063	1063	1058	1059	1051	1066	1063	1065	1066	1069	1070	1070	1069	1073	1079	1073	1067	1056	1062	1049	1063
15	1037	1028	1042	1048	1054	1058	1061	1058	1061	1060	1058	1058	1061	1063	1069	1072	1073	1070	1069	1062	1060	1061	1059	1051	1058
16 q	1033	1042	1051	1055	1056	1057	1057	1057	1058	1059	1055	1054	1056	1060	1063	1063	1062	1062	1062	1063	1064	1061	1058	1055	1057
17 q	1055	1055	1057	1057	1057	1057	1058	1057	1057	1056	1056	1057	1061	1062	1068	1075	1078	1079	1079	1079	1079	1074	1068	1061	1064
18	1051	1050	1051	1054	1057	1058	1058	1057	1057	1057	1055	1056	1061	1063	1057	1072	1066	1063	1063	1059	1076	1067	1066	1063	1061
19 q	1063	1062	1060	1058	1057	1057	1055	1052	1051	1051	1052	1056	1057	1060	1061	1061	1062	1063	1061	1061	1061	1061	1061	1061	1059
20	1061	1060	1057	1051	1051	1047	1048	1046	1047	1048	1049	1054	1054	1060	1063	1056	1073	1084	1106	1093	1079	1075	1079	1075	1064
21	1069	1064	1063	1063	1061	1060	1056	1053	1053	1056	1055	1060	1061	1062	1063	1065	1065	1064	1063	1067	1070	1069	1066	1062	1062
22 q	1062	1062	1062	1061	1061	1061	1061	1058	1057	1056	1057	1061	1061	1063	1063	1064	1063	1064	1063	1062	1061	1058	1060	1060	1061
23 d	1060	1061	1061	1057	1056	1055	1054	1053	1052	1051	1051	1054	1060	1068	1075	1097	1102	1090	1079	1075	1080	1066	1000	966	1059
24 d	960	905	993	967	942	971	1015	1034	1049	1070	1091	1087	1097	1114	1094	1088	1084	1085	1094	1085	1048	1063	1069	1068	*1045*
25 d	1056	1049	1028	1035	1030	1039	1049	1057	1061	1066	1073	1082	1081	1085	1093	1114	1103	1090	1090	1079	1078	1055	1046	1060	1067
26 d	1062	1055	1039	1001	1018	1043	1051	1055	1061	1067	1073	1070	1078	1099	1101	1095	1099	1094	1080	1079	1067	1067	1055	1045	1065
27	1051	1056	1058	1056	1057	1060	1061	1057	1056	1067	1066	1070	1072	1074	1079	1078	1075	1073	1073	1079	1085	1078	1069	1065	1067
28 d	1064	1066	1068	1068	1067	1063	1060	1059	1062	1067	1069	1074	1085	1091	1109	1104	1117	1113	1103	1102	1088	1079	1073	1061	*1080*
29	1038	1043	1045	1052	1061	1067	1067	1066	1065	1069	1070	1073	1075	1079	1080	1091	1091	1091	1091	1078	1073	1073	1073	1070	1070
30	1067	1066	1067	1066	1062	1060	1061	1061	1062	1063	1062	1061	1067	1073	1077	1079	1081	1082	1084	1084	1078	1073	1070	1064	1070
Mean	1053	*1051*	1053	1052	1053	1055	1056	1057	1058	1061	1061	1063	1066	1071	1075	*1078*	1078	1076	1077	1074	1071	1068	1063	1057	1064

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

145 ESKDALEMUIR — NOVEMBER 1942

	TERRESTRIAL MAGNETIC ELEMENTS												3-hr. range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination			Vertical force							
	Maximum 16,000γ +		Minimum 16,000γ +		Range	Maximum 12° +		Minimum 12° +		Range	Maximum 44,000γ +		Minimum 44,000γ +		Range				
	h. m.	γ	γ	h. m.	γ	h. m.	′	′	h. m.	′	h. m.	γ	γ	h. m.	γ				°A.
1	23 15	531	465	11 11	66	12 56	42·3	30·8	21 25	11·5	15 45	1085	1054	0 38	31	2,2,3,3,3,3,2,2	20	1	86·3
2	19 43	568	458	15 31	110	14 30	46·8	26·1	15 52	20·7	15 49	1116	1049	1 28	67	3,2,2,3,2,4,4,3	23	1	86·0
3	20 21	550	481	17 18	69	13 30	44·2	26·3	20 19	17·9	17 22	1100	1052	0 8	48	2,2,1,1,3,3,3,2	17	1	86·0
4	23 14	555	451	11 39	104	11 46	44·1	30·4	20 30	13·7	16 19	1073	1057	23 40	16	1,2,3,3,2,1,2,3	17	1	85·8
5	18 8	555	489	24 0	66	13 39	41·5	27·9	23 46	13·6	22 36	1078	1051	1 12	27	2,1,2,2,1,2,2,3	15	0	85·8
6	19 33	532	489	0 1	43	12 17	41·4	29·8	0 1	11·6	16 22	1073	1049	3 10	24	3,2,1,1,0,2,1,2	12	0	85·7
7	6 54	543	485	12 50	58	14 40	45·8	34·0	23 58	11·8	15 20	1080	1049	7 7	31	2,2,2,1,2,2,2,2	15	0	85·6
8	15 1	546	485	20 38	61	12 23	45·5	20·3	20 43	25·2	20 42	1103	1051	7 16	52	2,2,2,3,3,2,4,3	21	1	85·6
9 q	0 18	546	496	1 13	50	14 8	39·7	31·9	0 45	7·8	21 42	1069	1051	0 49	18	3,1,0,2,1,2,2,2	13	0	85·5
10	21 30	570	484	14 22	86	14 18	44·3	29·7	24 0	14·6	14 52	1079	1048	21 54	31	2,1,2,2,3,2,2,3	17	1	85·5
11	19 24	546	489	19 7	57	12 1	43·3	19·4	19 13	23·9	19 8	1081	1045	1 50	36	3,2,2,2,3,1,4,3	20	1	85·5
12	23 3	558	496	4 32	62	13 1	40·5	29·8	18 47	10·7	15 5	1073	1040	23 44	33	2,3,2,1,2,2,3,3	18	1	85·4
13	7 24	539	468	14 42	71	14 26	45·9	29·6	20 31	16·3	15 25	1088	1038	0 42	50	2,2,1,2,4,3,3,3	20	1	85·4
14	20 29	566	492	11 32	74	20 38	41·3	19·9	18 19	21·4	18 7	1086	1043	23 51	43	3,2,2,2,2,3,4,3	21	1	85·3
15	23 47	562	494	2 37	68	0 39	45·9	31·3	19 8) 20 16)	14·6	16 11	1076	1021	1 7	55	4,2,1,1,2,2,3,3	18	1	85·3
16 q	0 1	558	504	10 10	54	12 10	39·3	31·9	19 49	7·4	20 3	1067	1031	0 38	36	3,1,1,1,1,0,2,2	11	0	85·2
17 q	4 29	542	490	23 4	52	13 52	41·6	28·9	24 0	12·7	19 48	1081	1053	24 0	28	1,2,1,2,2,2,2,3	15	0	85·2
18	14 31	536	492	19 54	44	9 12	40·0	27·1	20 17	12·9	20 7	1079	1049	1 58	30	3,2,2,3,2,3,3,2	20	1	85·2
19 q	8 28	542	504	11 29	38	11 58	40·1	31·3	19 58	8·8	17 26	1064	1050	9 40	14	1,1,2,2,1,2,2,2	13	0	85·1
20	8 4	552	457	18 26	95	12 36	44·1	20·6	18 35	23·5	18 50	1113	1045	7 58	68	2,2,2,3,2,3,4,3	21	1	85·1
21	8 20	528	496	11 26	*32*	13 12	40·5	28·7	21 26	11·8	20 25	1073	1052	7 10	21	2,2,2,2,2,1,3,2	16	0	85·1
22 q	21 23	547	508	10 18	39	13 13	39·6	32·3	17 55	*7·3*	18 5	1066	1055	9 55	*11*	1,1,1,1,1,2,2,2	11	0	85·0
23 d	23 12	546	417	23 34	129	13 39	44·0	*6·5*	22 59	37·5	16 5	1111	943	23 19	168	2,1,1,2,2,4,3,5	20	1	85·1
24 d	4 9	593	*363*	1 1	*230*	4 25	*52·3*	9·7	0 27	*42·6*	13 17	1121	*859*	1 13	*262*	5,5,4,5,4,3,5,3	34	2	85·2
25 d	21 32	*608*	426	10 49	182	21 43) 21 48)	43·2	19·9	21 20	23·3	15 49	1126	1022	2 18	104	4,3,3,4,3,4,4,5	30	1	85·2
26 d	19 55	596	445	14 21	151	3 10	51·9	11·7	19 53	40·2	16 42	1105	992	3 30	113	4,4,2,3,4,4,5,4	30	1	85·1
27	21 29	536	447	9 32	89	10 2	43·1	21·7	20 23	21·4	20 37	1087	1046	0 1	41	3,1,2,3,2,1,3,3	18	1	85·1
28 d	22 55	561	429	17 38	132	14 18	44·1	7·3	17 46	36·8	16 27	*1135*	1058	7 30	77	3,2,3,3,3,5,4,5	28	1	85·0
29	23 14	532	449	0 1	83	12 49	43·0	21·7	0 57	21·3	16 8	1099	1031	0 40	68	4,2,2,3,3,3,3,3	23	1	85·0
30	5 16	533	481	14 11	52	14 6	41·4	31·4	20 1	10·0	18 59	1087	1058	5 20	29	2,2,2,2,3,2,2,2	17	0	84·9
Mean	- -	553	471	- -	82	- -	43·4	24·9	- -	18·4	- -	1089	1035	- -	54	2·4	19·1	0·70	85·4

q denotes an international quiet day and d an international disturbed day.

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

146 ESKDALEMUIR (H) — 16,000γ (0·16 C.G.S. unit) + — DECEMBER 1942

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	518	515	515	518	519	522	523	521	514	510	507	506	505	507	513	520	525	524	515	506	515	522	536	507	516
2	526	506	513	516	519	519	518	518	518	517	515	512	511	516	519	520	522	525	522	525	522	523	522	518	518
3	516	511	512	515	518	520	522	521	520	518	515	515	513	518	522	522	525	515	519	522	522	523	545	538	520
4	508	511	518	518	519	522	514	529	525	524	519	516	519	516	496	494	520	526	522	523	522	520	522	522	518
5	515	525	523	517	515	518	519	519	520	518	514	514	518	522	523	520	519	529	526	526	523	523	523	522	520
6	522	522	523	527	528	529	527	525	522	515	512	512	515	521	522	527	530	530	525	511	510	514	529	526	522
7	520	523	526	530	533	535	531	531	530	523	514	519	515	511	514	509	488	494	493	493	495	486	511	514	514
8	504	507	513	519	522	525	530	529	513	511	510	510	512	509	515	499	497	485	493	494	475	490	501	503	507
9 d	508	514	503	510	519	522	529	526	528	522	525	522	529	526	494	521	533	510	510	494	486	480	484	459	511
10 d	521	514	506	513	483	509	514	508	493	495	496	500	499	502	514	518	513	513	512	506	521	529	506	506	508
11	506	509	511	510	510	524	521	517	515	497	495	499	495	482	524	523	520	520	518	517	519	514	522	558	514
12	522	495	509	511	518	523	527	525	510	502	495	491	483	494	507	512	526	522	522	521	517	512	505	514	511
13	514	515	512	513	515	517	521	518	518	514	510	516	514	518	517	517	510	517	519	516	514	514	518	518	516
14	522	519	514	514	520	526	531	534	530	518	508	510	514	513	515	516	511	510	501	509	516	514	511	514	516
15	516	517	514	517	521	526	529	529	523	515	514	515	517	524	529	533	532	526	526	529	529	524	518	523	523
16	516	510	514	517	520	523	524	529	506	520	517	514	517	519	525	524	514	521	511	514	517	518	525	517	518
17 q	517	517	518	521	522	525	531	529	526	527	526	521	521	522	524	526	522	518	521	520	517	519	521	519	522
18 q	520	517	518	522	522	525	526	529	529	525	521	525	526	529	529	529	530	530	532	529	529	528	526	522	526
19 q	522	522	524	526	528	533	533	530	533	528	525	521	522	527	530	534	533	533	533	530	530	528	529	524	*528*
20	529	519	530	536	533	537	537	535	531	524	518	519	521	526	527	529	529	518	518	518	528	526	522	560	528
21 d	510	521	517	526	533	552	541	538	533	508	475	505	462	464	496	526	460	486	489	510	512	515	529	511	509
22	506	494	522	529	498	517	518	519	507	507	503	485	506	508	510	514	519	519	514	510	518	519	519	517	512
23 d	517	518	517	514	521	526	526	502	491	481	451	456	440	460	466	505	490	471	479	486	498	506	498	505	*493*
24	510	502	499	503	506	510	514	510	510	487	510	500	500	501	470	486	499	503	514	506	518	529	532	498	505
25	503	503	510	506	513	513	514	518	510	495	497	499	506	498	498	499	494	490	505	514	507	522	499	500	505
26 d	500	501	508	513	532	534	540	514	510	505	502	494	490	496	483	503	505	499	501	500	517	510	482	522	507
27	505	510	514	514	525	524	529	523	518	513	506	506	509	510	507	515	518	521	521	516	515	514	510	513	515
28	513	513	514	518	525	528	522	521	517	513	515	517	513	510	514	517	518	517	518	518	517	518	518	521	517
29	517	517	517	520	521	524	527	525	522	519	519	511	509	507	515	519	514	513	521	519	515	510	513	517	517
30 q	515	515	517	521	521	521	521	521	521	515	509	510	514	518	520	521	522	522	525	522	519	514	515	518	518
31 q	521	528	517	517	521	525	527	529	525	518	511	509	516	521	525	525	525	525	526	527	529	529	526	524	523
Mean	515	513	515	518	519	524	*525*	523	518	512	508	508	*507*	509	512	517	515	514	515	514	515	516	517	517	515

524 at 0-1h. January 1, 1943

MAGNETIC DECLINATION (WEST)

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

147 ESKDALEMUIR (D) — 12° + — DECEMBER 1942

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	36·8	35·4	35·8	36·2	36·9	36·3	36·0	35·8	35·3	35·4	36·2	37·9	38·6	39·5	39·6	37·8	37·9	37·7	37·7	30·6	36·1	34·8	30·4	32·8	36·1
2	31·6	34·9	35·0	34·2	35·0	35·2	35·4	35·5	35·5	35·5	36·1	37·0	37·8	38·3	37·9	37·1	36·8	36·5	36·2	35·9	35·9	35·4	35·2	34·8	35·8
3	31·3	33·5	34·9	35·3	35·3	35·3	35·3	35·2	35·3	35·0	35·9	37·9	38·6	38·6	38·1	37·0	37·1	37·4	37·2	36·5	35·9	35·7	35·4	35·0	35·9
4	29·7	31·5	34·2	32·6	34·1	34·1	34·6	35·6	35·4	35·8	36·7	38·1	40·3	41·1	42·9	43·3	39·4	37·5	36·5	35·9	35·9	34·5	34·0	33·2	36·1
5	35·2	37·2	35·9	33·7	33·7	34·2	35·0	34·9	35·0	35·1	37·2	38·8	39·5	38·9	38·0	37·6	36·1	36·1	36·1	35·3	35·0	35·2	35·4	35·8	36·0
6	36·1	36·8	36·8	36·8	36·4	36·0	35·5	35·1	35·0	34·5	36·5	38·0	39·0	38·8	38·0	37·1	36·9	37·0	37·7	36·7	35·1	33·5	31·3	29·8	36·0
7	34·5	36·3	37·0	37·6	37·1	36·4	35·1	35·2	35·2	35·3	37·8	41·0	43·0	44·4	42·0	40·3	41·6	40·5	37·2	32·7	31·6	26·2	28·0	28·3	*36·4*
8	30·9	35·5	37·2	37·0	36·7	36·5	35·8	35·9	35·3	35·0	36·9	39·1	41·0	41·7	44·4	46·2	47·6	44·9	34·4	33·1	16·3	23·4	29·8	31·3	36·1
9 d	32·7	35·1	38·6	37·7	35·0	36·3	35·1	35·0	35·1	35·0	37·8	37·5	39·9	41·2	42·1	36·7	41·3	37·1	37·8	38·1	28·9	35·7	26·2	25·7	35·5
10 d	17·2	27·4	29·9	34·2	36·3	34·7	34·4	35·5	38·7	34·6	36·0	37·2	39·5	38·7	38·6	38·8	37·9	37·0	36·2	36·0	32·3	30·0	30·5	33·5	*34·4*
11	34·5	35·9	35·4	35·4	36·8	33·4	34·9	35·1	35·1	35·2	36·9	37·2	38·0	39·2	36·9	37·6	37·3	37·0	36·7	33·4	34·5	33·2	32·3	30·2	35·5
12	30·4	31·8	35·9	36·0	36·3	36·0	35·4	36·2	37·9	35·5	35·9	35·7	36·1	38·4	37·2	36·6	36·7	36·7	36·1	35·3	35·0	33·6	31·3	29·2	35·2
13	35·7	34·5	35·1	35·9	35·5	35·8	35·5	35·3	35·1	34·6	35·4	37·1	37·7	37·9	37·9	38·2	38·6	38·1	36·8	36·3	35·0	34·0	34·0	32·6	35·9
14	34·8	35·9	35·0	35·2	35·1	35·3	36·0	35·7	36·1	35·5	36·3	38·7	38·9	40·2	40·8	39·9	40·2	34·3	37·3	35·1	35·3	35·1	33·0	33·5	36·4
15	36·8	35·3	35·5	36·7	36·0	36·0	36·0	36·0	35·4	35·0	35·3	37·0	37·9	38·6	38·5	37·8	37·4	37·8	35·5	34·1	33·0	34·3	34·2	29·9	35·8
16	30·0	32·9	34·3	35·0	35·1	36·6	36·3	36·4	36·0	35·6	36·7	36·1	37·1	38·0	37·7	37·8	36·1	36·0	36·7	35·5	35·2	32·1	33·1	34·0	35·4
17 q	35·0	35·4	35·9	35·9	35·6	35·9	35·2	35·2	35·2	35·5	36·1	36·3	37·5	38·7	37·9	37·0	37·0	36·3	36·6	35·9	35·1	34·1	33·5	34·5	35·9
18 q	35·3	35·4	36·2	36·4	35·2	35·2	35·0	34·9	34·4	35·0	36·2	37·5	37·8	37·9	37·1	36·6	36·2	36·0	35·9	35·5	35·3	35·1	35·1	35·4	35·9
19 q	35·5	35·8	36·3	36·2	36·7	35·4	35·2	35·3	35·9	35·1	35·4	36·1	37·1	37·7	37·7	36·9	36·4	36·2	36·0	35·9	35·6	35·1	34·9	34·8	36·0
20	35·3	33·8	40·6	35·1	35·2	35·3	35·4	35·2	35·1	35·2	36·0	37·1	37·5	38·7	38·2	38·6	38·8	37·1	33·2	36·5	34·3	34·2	33·6	27·9	35·7
21 d	27·7	34·8	33·8	38·8	38·4	44·0	39·1	37·9	36·9	37·7	40·9	41·6	42·3	44·1	42·5	39·0	35·3	35·3	30·4	32·5	30·8	28·8	27·7	30·7	36·3
22	32·4	32·5	40·5	37·7	34·4	35·8	36·2	39·0	37·9	36·0	37·8	37·0	36·1	38·2	37·8	37·0	36·8	36·0	35·9	33·5	33·3	34·2	34·3	35·0	36·1
23 d	35·2	35·3	36·1	35·0	38·1	33·6	34·6	36·6	39·8	37·9	37·7	38·1	42·4	41·2	43·3	29·9	37·0	24·8	31·6	33·7	31·4	30·4	33·1	34·7	35·5
24	36·1	36·4	35·2	35·2	35·9	36·4	37·7	38·7	39·8	38·8	37·3	39·1	36·9	38·6	35·9	38·1	36·8	31·4	31·7	34·2	33·3	32·3	30·0	30·6	35·7
25	34·1	33·3	36·2	33·4	34·6	34·6	35·0	35·1	35·2	36·8	38·7	38·0	38·1	37·7	36·9	37·0	35·7	34·9	35·5	35·2	33·6	33·2	29·9	30·7	35·1
26 d	30·1	31·0	33·5	35·0	37·7	35·8	36·1	35·7	36·1	39·5	40·1	39·6	39·8	39·5	38·6	38·6	39·5	28·4	28·0	34·2	32·1	31·4	27·0	28·0	34·8
27	32·5	34·6	35·4	36·0	37·6	37·1	35·5	35·8	35·5	35·6	36·1	37·0	37·3	37·9	36·9	36·4	36·1	35·9	35·8	35·5	35·1	31·0	31·0	34·0	35·5
28	34·1	35·0	35·2	37·6	35·9	35·2	35·9	36·0	35·5	35·2	35·9	36·8	37·7	39·4	38·7	37·0	36·2	35·2	35·8	34·7	35·2	34·6	34·4	35·0	35·9
29	35·1	35·1	35·5	36·0	35·2	35·3	35·2	35·2	35·1	35·2	36·8	37·7	38·9	37·8	37·8	36·1	35·1	34·7	36·0	36·0	34·5	32·9	32·9	33·8	35·6
30 q	34·5	35·4	36·0	36·0	35·8	35·7	35·3	35·2	35·1	35·0	35·7	36·7	37·3	37·6	37·0	36·2	36·0	35·9	35·7	35·3	35·0	34·1	33·9	34·3	35·6
31 q	35·1	34·4	33·8	35·2	35·2	35·2	35·2	35·0	34·3	34·1	35·0	36·1	37·3	37·7	37·1	36·4	36·3	36·0	35·8	35·5	35·2	35·0	35·0	35·3	35·5
Mean	33·1	34·5	35·7	35·8	35·9	35·8	35·6	35·8	35·9	35·7	36·7	37·7	38·6	*39·2*	38·8	37·8	37·7	36·0	35·5	35·0	33·6	32·7	*32·3*	32·4	35·7

35·3 at 0-1h. January 1, 1943

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

148 ESKDALEMUIR (V) — 44,000γ (0·44 C.G.S. unit) + — DECEMBER 1942

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	1057	1060	1052	1063	1064	1064	1064	1054	1064	1064	1060	1060	1056	1070	1072	1069	1068	1068	1072	1082	1073	1069	1061	1051	1066
2	1054	1060	1062	1063	1063	1062	1062	1062	1062	1063	1061	1061	1062	1063	1067	1068	1068	1067	1067	1067	1067	1067	1067	1069	1064
3	1068	1067	1067	1067	1066	1064	1063	1062	1063	1061	1057	1055	1060	1062	1067	1058	1068	1068	1068	1068	1068	1068	1066	1046	1064
4	1051	1058	1061	1061	1061	1061	1060	1055	1056	1056	1055	1054	1055	1058	1068	1078	1076	1072	1072	1071	1069	1070	1068	1063	1063
5	1063	1059	1049	1050	1056	1060	1061	1060	1060	1061	1061	1061	1061	1051	1063	1068	1068	1066	1064	1064	1063	1063	1063	1063	1061
6	1063	1063	1062	1062	1062	1061	1061	1061	1061	1060	1056	1055	1057	1061	1065	1067	1064	1063	1063	1068	1071	1070	1061	1055	1062
7	1057	1057	1058	1058	1058	1057	1058	1057	1058	1061	1060	1059	1063	1063	1069	1076	1090	1097	1100	1105	1097	1091	1069	1045	1069
8	1055	1061	1063	1064	1064	1063	1062	1061	1062	1063	1061	1062	1065	1059	1072	1080	1097	1120	1123	1096	1140	1092	1075	1073	1077
9 d	1072	1066	1067	1058	1060	1063	1054	1063	1061	1060	1058	1061	1062	1067	1079	1081	1074	1098	1127	1165	1142	1129	1050	994	1076
10 d	989	1025	1025	1016	1028	1049	1055	1061	1062	1066	1067	1068	1068	1070	1072	1075	1075	1075	1076	1078	1076	1066	1061	1064	*1057*
11	1068	1069	1059	1066	1057	1055	1061	1062	1062	1066	1068	1068	1073	1077	1072	1073	1072	1071	1070	1072	1070	1072	1070	1044	1067
12	1040	1050	1055	1061	1062	1062	1061	1061	1061	1063	1062	1068	1079	1076	1075	1076	1073	1070	1069	1069	1069	1071	1072	1066	1065
13	1060	1057	1061	1064	1066	1066	1063	1063	1062	1062	1061	1060	1060	1062	1064	1067	1069	1070	1072	1073	1073	1073	1070	1067	1065
14	1062	1058	1060	1062	1062	1062	1062	1061	1061	1061	1061	1060	1061	1061	1066	1069	1073	1081	1085	1083	1076	1073	1073	1068	1067
15	1061	1061	1062	1062	1062	1063	1062	1062	1062	1063	1062	1061	1061	1061	1061	1062	1062	1063	1057	1068	1067	1067	1067	1066	1063
16	1063	1062	1062	1062	1063	1060	1057	1056	1057	1057	1057	1060	1063	1062	1064	1067	1069	1072	1072	1074	1073	1074	1069	1067	1064
17 q	1064	1063	1063	1063	1063	1062	1062	1061	1061	1061	1061	1060	1058	1062	1063	1064	1065	1067	1067	1067	1068	1068	1067	1065	1064
18 q	1063	1062	1062	1061	1062	1062	1062	1061	1060	1058	1057	1057	1057	1057	1061	1061	1061	1061	1061	1061	1061	1061	1061	1061	1060
19 q	1061	1061	1060	1058	1057	1057	1060	1059	1059	1058	1061	1061	1061	1061	1062	1062	1061	1061	1061	1061	1061	1061	1061	1061	1060
20	1057	1057	1052	1048	1052	1053	1054	1055	1057	1057	1056	1057	1061	1060	1062	1063	1062	1066	1073	1069	1068	1069	1069	1057	1060
21 d	1058	1059	1060	1054	1052	1037	1036	1040	1045	1054	1061	1060	1078	1093	1091	1091	1105	1103	1099	1082	1075	1070	1061	1052	1067
22	1055	1048	1032	1022	1037	1045	1053	1055	1056	1061	1063	1070	1072	1075	1078	1078	1073	1070	1072	1073	1069	1068	1067	1066	1061
23 d	1056	1066	1066	1064	1062	1061	1057	1060	1062	1072	1081	1085	1114	1121	1127	1133	1108	1128	1115	1104	1088	1075	1073	1068	*1086*
24	1058	1056	1063	1066	1066	1064	1063	1062	1062	1067	1067	1069	1070	1075	1090	1094	1088	1087	1078	1075	1072	1063	1052	1055	1069
25	1061	1061	1039	1044	1056	1061	1063	1063	1064	1063	1063	1064	1065	1072	1080	1079	1081	1085	1081	1075	1075	1071	1063	1063	1066
26 d	1057	1050	1049	1053	1033	1037	1044	1055	1057	1061	1062	1067	1069	1073	1090	1083	1085	1087	1096	1085	1079	1062	1061	1044	1064
27	1051	1059	1053	1063	1061	1057	1056	1057	1057	1059	1061	1063	1064	1069	1070	1069	1059	1069	1069	1069	1069	1071	1070	1068	1064
28	1063	1062	1062	1061	1059	1061	1062	1063	1062	1062	1062	1061	1063	1066	1067	1069	1070	1073	1070	1069	1069	1069	1067	1067	1065
29	1067	1067	1065	1063	1063	1063	1063	1062	1062	1063	1063	1064	1065	1057	1068	1069	1071	1073	1068	1068	1069	1073	1070	1068	1066
30 q	1067	1064	1064	1064	1066	1066	1066	1066	1066	1067	1064	1062	1062	1062	1062	1063	1066	1066	1066	1066	1057	1068	1068	1057	1065
31 q	1063	1058	1061	1061	1062	1062	1063	1062	1063	1064	1063	1061	1059	1061	1062	1063	1063	1062	1062	1062	1062	1063	1063	1062	1062
Mean	1058	1059	1058	*1057*	1058	1059	1059	1060	1060	1062	1062	1062	1066	1068	1072	1074	1074	1077	*1078*	1077	1076	1072	1066	1059	1065

1062 at 0-1h. January 1, 1943

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

149 ESKDALEMUIR — DECEMBER 1942

	TERRESTRIAL MAGNETIC ELEMENTS												3-hr. range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination				Vertical force						
	Maximum 16,000γ +		Minimum 16,000γ +		Range	Maximum 12° +		Minimum 12° +		Range	Maximum 44,000γ +		Minimum 44,000γ +		Range				
	h. m.	γ	γ	h. m.	γ	h. m.	′	′	h. m.	′	h. m.	γ	γ	h. m.	γ				°A.
1	22 30	549	483	19 0	66	14 0	40·4	27·8	19 10	12·6	19 24	1085	1055	24 0	30	2,0,1,1,1,2,3,3	13	0	85·0
2	0 2	547	500	1 11	47	13 15	38·7	30·7	0 34	8·0	23 40	1069	1052	0 20	17	3,1,1,1,1,1,1,1	10	0	85·0
3	22 52	593	508	1 27	85	12 59	38·7	26·7	24 0	12·0	0 50	1069	1043	23 43	26	2,1,0,1,1,2,1,4	12	0	85·0
4	23 15	534	483	15 35	51	15 12	46·1	25·2	0 5	20·9	15 58	1082	1043	0 1	39	3,2,2,1,3,3,1,2	17	0	85·0
5	2 12	537	511	3 55) 11 36)	26	11 57	40·1	33·3	4 40	6·8	15 50	1069	1048	2 20	21	2,1,1,1,1,1,1,0	8	0	84·9
6	22 32	543	502	8 43	41	12 33	39·6	26·4	23 2	13·2	20 58	1073	1055	22 50	18	1,0,0,1,1,0,2,3	8	0	84·9
7	22 53	539	479	21 24	60	13 18	45·8	20·0	21 6	25·8	19 20	1106	1042	23 8	64	2,1,1,2,2,3,4,4	19	1	84·8
8	6 27	533	466	20 42	67	16 43	49·3	9·0	20 45	*40·3*	20 38	1148	1048	0 1	100	3,2,2,1,2,3,5,4	22	1	84·7
9 d	16 20	549	*396*	23 45	153	19 2	48·1	7·9	24 0	40·2	19 45) 19 54)	*1183*	985	23 15	*198*	3,2,1,2,4,4,4,5	25	2	84·7
10 d	0 11	*607*	446	0 47	*161*	12 1	41·3	*6·4*	0 3	34·9	20 21	1081	*961*	0 20	120	5,3,3,2,2,2,4,4	25	1	84·7
11	23 14	591	471	13 55	120	13 26	40·5	26·0	23 45	14·5	13 22	1079	1039	23 38	40	1,2,2,2,4,2,2,4	19	1	84·7
12	16 15	541	471	12 29	70	13 47	39·7	27·1	23 46	12·6	12 34	1081	1038	0 20	43	3,2,2,3,3,3,1,3	20	1	84·7
13	23 3	534	498	0 1	36	16 1	39·6	30·0	0 1	9·6	19 59	1075	1054	0 51	21	2,0,1,1,1,2,2,2	11	0	84·7
14	7 48	537	493	17 58	44	13 5	42·2	30·0	23 8	12·2	19 14	1087	1055	1 39	32	2,2,2,2,2,3,2,2	17	0	84·7
15	16 28	537	511	0 40	26	0 36	39·8	28·7	23 51	11·1	19 0	1070	1058	1 7	12	2,1,0,1,2,2,2,2	12	0	85·0
16	22 27	537	501	16 58	36	16 10	38·6	25·3	21 50	13·3	21 42	1075	1055	7 26	20	2,1,2,1,1,2,2,3	14	0	85·0
17 q	9 40	533	510	23 50	23	13 22	39·0	33·1	21 55	5·9	22 19	1069	1058	12 10	11	0,1,1,1,1,2,1,2	9	0	85·0
18 q	18 18	535	512	0 1	23	13 1	38·6	34·2	8 41	4·4	0 5	1067	1056	13 37	11	1,1,1,1,1,1,1,0	7	0	85·0
19 q	22 39	541	519	2 12	22	13 7	37·9	34·1	23 17	*3·8*	14 22	1063	1056	9 2	7	1,1,1,1,1,1,0,2	8	0	85·0
20	23 29	600	494	17 54	106	2 37	43·2	24·4	23 26	18·8	18 10	1078	1043	2 58	35	3,2,0,1,1,3,3,4	17	0	85·0
21 d	5 39	568	427	12 25	141	5 28	*50·3*	22·5	22 10	27·8	16 56	1112	1030	5 44	82	3,3,3,4,4,4,4,4	29	1	85·0
22	3 17	543	464	11 29	79	2 19	42·1	27·8	1 38	14·3	14 58	1081	1019	3 17	62	4,3,2,3,3,1,2,1	19	1	85·1
23 d	15 4	535	416	12 29	119	14 3	47·1	18·7	17 45	28·4	15 9	1154	1057	6 33	97	1,3,3,4,4,4,4,3	26	1	85·0
24	22 2	568	448	14 19	120	15 25	41·5	25·3	18 4	16·2	15 33	1097	1051	22 50	46	2,2,2,3,4,3,3,4	23	1	85·0
25	21 40	552	482	13 9	70	2 21	43·4	27·1	22 38	16·3	17 49	1087	1028	2 40	59	3,2,2,2,3,2,3,4	21	1	85·0
26 d	20 50	580	466	17 57	114	16 25	42·3	23·7	18 20	18·6	18 18	1103	1028	4 29	75	2,3,3,2,3,3,5,4	25	1	85·0
27	6 24	533	494	0 6	39	4 9) 13 38)	38·7	29·4	22 15	9·3	21 33	1073	1044	0 1	29	2,2,1,1,2,0,1,2	11	0	85·0
28	5 9	529	506	12 52	23	13 27	40·4	33·6	0 49	6·8	17 48	1074	1057	3 48	17	1,2,0,1,1,1,1,1	8	0	85·0
29	6 44	529	502	13 12	27	12 40	39·6	31·5	21 56	8·1	17 12	1074	1061	7 52	13	0,1,0,1,1,2,1,2	8	0	85·0
30 q	18 30	525	506	11 3	*19*	13 18	37·7	33·2	21 48	4·5	21 42	1069	1051	13 12	8	1,0,1,1,0,0,1,1	5	0	85·0
31 q	1 27	532	506	11 0	26	13 24	37·8	32·5	1 59	5·3	0 1	1066	1056	1 30	10	2,1,1,0,1,0,0,0	5	0	85·0
Mean	- -	549	483	- -	66	- -	41·6	26·2	- -	15·4	- -	1087	1043	- -	44	1·9	15·3	0·42	84·9

q denotes an international quiet day and d an international disturbed day.

DIURNAL INEQUALITIES OF THE GEOGRAPHICAL COMPONENTS OF MAGNETIC FORCE

ALL DAYS

Departures from the mean of the 24 hourly values (uncorrected for non-cyclic change)

150 ESKDALEMUIR 1942

NORTH COMPONENT

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	+0·3	−0·5	−0·8	+2·9	+7·5	+9·4	*+10·2*	+8·4	+3·4	−2·9	−8·5	*−10·3*	−7·8	−4·1	−3·1	−3·1	−1·9	−2·2	+1·3	−0·9	−1·0	−0·2	+2·1	+1·8
Feb.	+0·1	−1·3	−0·5	+2·3	+4·7	+7·4	*+8·2*	+7·4	+0·8	−2·4	−7·0	−10·1	*−10·5*	−5·9	−1·6	−2·9	+0·5	+0·3	+2·8	+0·8	+2·3	−0·3	+0·3	+4·7
Mar.	+0·1	+0·8	−2·3	0·0	+4·1	+6·3	+7·3	−3·0	−10·3	−11·6	−16·3	*−21·4*	−15·9	−12·5	−5·2	+1·9	+7·5	+7·5	+10·1	+10·8	*+13·6*	+9·4	+12·9	+6·4
Apr.	+2·8	+3·5	+0·1	+4·8	+7·6	+11·6	+7·2	+1·9	−5·2	−17·7	−28·9	*−34·8*	−31·0	−21·9	−10·6	−1·8	+9·5	+14·9	*+17·5*	+15·1	+13·1	+14·7	+15·4	+12·2
May	+5·5	+5·5	+5·4	+4·8	+6·7	+4·4	−0·7	−5·3	−10·1	−16·5	−23·6	*−27·2*	−25·5	−17·8	−9·8	+0·3	+10·2	+17·2	*+18·9*	+18·3	+13·8	+10·0	+8·2	+7·2
June	+7·5	+5·6	+4·9	+5·6	+3·8	+4·0	−0·7	−7·2	−14·3	−20·9	*−25·9*	−25·4	−22·6	−15·0	−8·1	+3·5	+13·3	+18·1	*+18·2*	+16·9	+13·7	+9·4	+8·8	+7·1
July	+5·9	+5·1	+4·2	+4·5	+5·6	+1·2	−5·2	−6·0	−16·2	−23·5	*−27·3*	−26·2	−22·5	−17·8	−8·4	+2·6	+7·8	+17·1	+22·1	*+23·2*	+20·4	+13·4	+10·4	+9·8
Aug.	+7·4	+6·8	+2·8	+1·1	+2·9	+2·8	−1·5	−7·9	−12·2	−20·2	−25·5	*−25·6*	−19·2	−15·4	−6·5	+2·1	+1·9	+13·2	+16·8	*+19·2*	+16·5	+16·1	+14·7	+9·8
Sept.	+6·4	+5·1	+3·4	+3·9	+1·9	+3·0	+2·8	−1·2	−8·5	−20·1	*−27·0*	−24·9	−20·0	−13·5	−6·5	−1·3	+4·3	+9·4	+13·6	+13·0	+13·5	+15·1	*+17·5*	+10·0
Oct.	+5·5	−1·1	+0·1	+3·3	+5·6	+7·0	+7·0	+4·0	+0·4	−11·1	−21·4	*−22·3*	−20·5	−14·9	−6·9	+2·7	−1·8	+8·6	+10·9	+8·8	+7·4	+9·2	*+11·1*	+8·5
Nov.	+1·7	+1·2	+1·0	+2·5	+8·0	*+9·5*	+9·0	+6·1	+0·8	−6·9	−11·6	*−14·0*	−13·6	−10·2	−8·8	−5·5	−0·4	+0·6	+1·3	+4·7	+4·7	+6·3	+6·2	+7·2
Dec.	+2·3	−0·7	−0·3	+2·4	+3·8	+8·7	*+10·0*	+7·8	+2·7	−2·7	−8·0	−9·3	*−10·6*	−9·3	−6·9	−0·6	−2·4	−1·7	−0·5	−0·6	+2·1	+3·8	+5·0	+5·3
Year	+3·7	+2·4	+1·5	+3·2	+5·2	+6·3	+4·5	+0·4	−5·7	−13·1	−19·2	*−20·9*	−18·3	−13·2	−6·9	−0·1	+4·0	+8·6	*+11·1*	+10·8	+10·0	+8·9	+9·3	+7·5
Winter	+1·1	−0·3	−0·2	+2·5	+6·0	+8·7	*+9·4*	+7·5	+1·9	−3·7	−8·8	*−10·9*	−10·6	−7·4	−5·1	−3·0	−1·1	−0·7	+1·3	+1·0	+2·0	+2·3	+3·3	+4·7
Equinox	+3·7	+2·1	+0·3	+3·0	+4·8	+7·0	+6·0	+0·4	−5·9	−15·2	−23·5	*−25·8*	−21·8	−15·7	−7·2	+0·5	+4·9	+10·1	+12·9	+11·9	+11·9	+12·1	*+14·3*	+9·3
Summer	+6·5	+5·7	+4·3	+4·0	+4·7	+3·1	−2·0	−6·6	−13·2	−20·3	−25·6	*−26·1*	−22·4	−16·4	−8·2	+2·2	+8·3	+16·4	+19·0	*+19·4*	+16·1	+12·2	+10·5	+8·5

WEST COMPONENT

	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	−8·7	−5·9	−6·3	−5·3	−4·1	−1·7	−0·2	−0·1	−0·9	−0·4	+3·0	+7·3	+13·7	*+16·9*	+13·9	+10·7	+9·3	+7·5	+1·8	−2·7	−8·4	−12·7	*−15·0*	−11·8
Feb.	−8·7	−3·8	−6·7	−9·1	−11·2	−8·4	−5·5	−4·6	−3·9	−0·2	+4·5	+10·5	+16·5	*+19·9*	+19·0	+11·0	+8·7	+4·0	+2·0	+3·2	−5·5	−8·9	*−13·1*	−9·7
Mar.	−7·5	−7·3	−11·6	−8·9	−9·7	−7·1	−5·8	−2·2	−4·5	*−13·8*	−2·6	+6·5	+19·7	*+25·2*	+24·9	+18·2	+13·2	+1·3	+0·4	−2·5	−4·8	−6·6	−7·7	−6·8
Apr.	−11·1	−13·6	−9·0	−12·6	−11·3	−11·0	−12·9	−14·2	*−17·3*	−14·5	−7·7	+6·0	+23·7	*+34·2*	+32·8	+25·9	+19·1	+12·4	+1·3	−2·7	−1·0	−4·7	−5·0	−6·9
May	−7·7	−7·1	−8·2	−12·3	−14·8	−18·2	−19·5	*−21·2*	−20·7	−17·1	−7·0	+7·3	+18·7	+25·1	*+26·4*	+25·0	+23·0	+19·4	+13·1	+7·1	+0·5	−1·7	−4·1	−6·2
June	−2·7	−7·0	−13·5	−16·9	−19·2	−22·7	−27·0	*−27·4*	−26·5	−18·7	−6·4	+6·9	+18·7	+25·3	*+28·2*	+28·1	+24·4	+20·2	+17·0	+11·0	+5·7	+3·4	+1·2	−2·4
July	−7·5	−12·7	−13·9	−9·9	−13·7	−14·4	−17·8	*−20·6*	−20·1	−17·4	−8·1	+4·8	+17·3	+24·6	*+26·2*	+24·3	+20·7	+17·0	+14·4	+10·4	+4·4	−1·1	−1·7	−5·2
Aug.	−5·3	−5·5	−9·8	−8·9	−11·0	−16·1	−19·2	*−20·5*	−20·4	−14·6	−2·4	+12·5	+25·5	*+30·1*	+28·5	+24·3	+15·7	+10·7	+5·9	+0·5	−3·5	−3·3	−7·4	−6·0
Sept.	−11·7	−5·8	−5·2	−6·0	−7·1	−7·5	−10·3	−12·3	*−14·9*	−12·2	−4·8	+10·8	+24·2	+27·7	*+29·3*	+24·5	+15·1	+3·9	−3·5	−3·1	−5·7	−7·4	−8·3	−9·5
Oct.	−7·5	+0·4	+0·1	−3·4	+0·1	+1·3	+1·9	+1·0	−4·7	−8·0	+0·2	+13·4	+22·7	*+23·9*	+22·2	+12·4	+4·4	−5·3	−8·0	−11·7	−14·4	*−18·1*	−12·3	−10·7
Nov.	−11·5	−6·9	−3·3	+0·2	+2·5	+2·5	+2·8	+3·2	+1·4	−0·3	+4·7	+11·3	*+16·9*	+16·2	+14·9	+8·1	+5·4	+0·9	−5·5	−7·8	−13·3	−11·3	*−15·6*	−15·5
Dec.	−12·4	−6·5	−0·3	+0·7	+1·7	+2·1	+1·5	+2·0	+1·4	−1·0	+3·2	+7·7	+11·8	*+15·1*	+13·7	+9·9	+9·1	+0·9	−1·3	−3·8	−10·2	−14·2	*−15·9*	−15·2
Year	−8·5	−6·8	−7·3	−7·7	−8·2	−8·4	−9·3	−9·7	*−10·9*	−9·9	−1·9	+8·7	+19·1	*+23·7*	+23·3	+18·5	+14·0	+7·7	+3·1	−0·2	−4·7	−7·2	−8·7	−8·8
Winter	−10·3	−5·7	−4·1	−3·4	−2·7	−1·4	−0·4	+0·1	−0·5	−0·5	+3·9	+9·2	+14·7	*+17·0*	+15·4	+9·9	+8·1	+3·3	−0·7	−2·8	−9·3	−11·8	*−14·9*	−13·1
Equinox	−9·5	−6·6	−6·4	−7·8	−7·1	−6·1	−6·8	−6·9	−10·3	*−12·1*	−3·7	+9·2	+22·6	*+27·8*	+27·3	+20·3	+13·0	+3·1	−2·5	−5·0	−6·5	−9·2	−8·3	−8·5
Summer	−5·8	−8·0	−11·4	−12·0	−14·7	−17·9	−20·8	*−22·4*	−21·9	−17·0	−6·0	+7·9	+20·1	+26·3	*+27·3*	+25·5	+21·0	+16·8	+12·6	+7·3	+1·8	−0·7	−3·0	−4·9

VERTICAL COMPONENT

	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	−1·0	−3·3	−3·7	−4·4	−5·5	−6·9	−7·1	*−7·5*	−6·4	−4·0	−3·2	−2·3	−2·6	−0·8	+2·6	+5·3	+5·8	+6·2	+7·0	+7·8	*+9·1*	+8·3	+5·3	+1·3
Feb.	−4·3	*−8·0*	−7·7	−6·3	−6·0	−5·6	−6·6	−7·7	−7·7	−7·5	−7·8	−6·7	−5·5	−2·4	+2·3	+8·8	*+15·0*	+14·9	+14·4	+14·0	+9·8	+7·4	+3·8	−0·6
Mar.	−10·4	−20·4	−21·0	*−22·1*	−16·9	−12·2	−9·3	−5·9	−4·8	−1·2	−4·3	−6·2	−4·9	+1·4	+9·9	+16·7	+22·0	*+27·4*	+26·6	+20·2	+10·9	+7·5	+1·3	−4·3
Apr.	−12·2	−19·5	*−22·4*	−15·5	−9·0	−7·0	−5·1	−5·6	−5·5	−6·0	−7·0	−8·5	−9·8	−3·6	+6·2	+15·9	+22·8	*+26·6*	+26·1	+21·4	+11·7	+8·3	+2·1	−4·4
May	−0·3	−3·3	−3·3	−1·3	−0·3	−0·6	−1·7	−3·5	−5·9	−8·9	−13·0	*−15·0*	−13·8	−8·5	−2·3	+3·9	+9·0	+12·9	*+15·0*	+14·0	+12·4	+8·5	+4·4	+1·6
June	−1·5	−6·5	−7·2	−5·2	−3·2	−3·3	−3·5	−3·9	−5·1	−8·1	−11·1	*−13·1*	−11·8	−6·4	−1·5	+3·5	+11·2	+15·7	*+17·0*	+16·3	+12·6	+8·6	+4·8	+1·7
July	−8·4	*−11·9*	−6·6	−4·2	−3·6	−4·0	−4·1	−4·8	−5·5	−7·8	−9·8	−11·5	−9·2	−4·8	+2·0	+9·0	+13·6	*+15·6*	+15·1	+15·0	+12·8	+9·9	+5·2	−2·0
Aug.	−9·1	−9·9	−8·7	−6·8	−5·1	−3·3	−1·3	−0·9	−2·0	−5·4	−9·3	*−12·4*	−11·4	−5·2	+2·4	+10·1	+15·8	+17·4	*+17·7*	+15·7	+12·1	+4·4	−0·2	−4·6
Sept.	*−12·7*	−12·0	−10·8	−10·5	−9·8	−6·6	−3·9	−2·8	−2·5	−2·0	−3·4	−5·3	−4·1	+0·5	+4·9	+11·6	+19·1	*+22·1*	+19·1	+13·4	+10·2	+4·0	−5·9	−12·6
Oct.	−16·5	*−19·8*	−19·4	−17·1	−15·0	−12·2	−9·2	−7·2	−5·8	−3·7	−4·4	−2·7	+2·0	+7·7	+14·4	+29·2	*+31·2*	+29·9	+24·7	+14·8	+7·2	−3·5	−9·9	−14·7
Nov.	−10·5	*−13·1*	−10·3	−11·2	−11·0	−9·0	−7·3	−6·9	−5·4	−3·0	−2·4	−0·4	+2·5	+7·6	+11·1	*+14·7*	+14·1	+12·6	+12·9	+10·2	+7·2	+4·0	−0·2	−6·2
Dec.	−7·6	−6·6	−7·2	*−7·9*	−7·3	−6·8	−6·1	−5·8	−5·3	−3·8	−3·8	−3·0	+0·1	+2·8	+6·4	+8·4	+8·5	+11·2	*+12·1*	+11·7	+10·2	+6·3	+0·1	−6·6
Year	−7·9	*−11·2*	−10·7	−9·4	−7·7	−6·5	−5·4	−5·2	−5·2	−5·1	−6·6	−7·3	−5·7	−1·0	+4·9	+11·4	+15·7	*+17·7*	+17·3	+14·5	+10·5	+6·1	+0·9	−4·3
Winter	−5·9	*−7·7*	−7·2	−7·5	−7·5	−7·1	−6·8	−7·0	−6·2	−4·6	−4·3	−3·1	−1·4	+1·8	+5·6	+9·3	+10·9	+11·2	*+11·6*	+10·9	+9·1	+6·5	+2·3	−3·0
Equinox	−12·9	−17·9	*−18·4*	−16·3	−12·7	−9·5	−6·9	−5·4	−4·7	−3·2	−4·8	−5·7	−4·2	+1·5	+8·9	+18·3	+23·8	*+26·5*	+24·1	+17·5	+10·0	+4·1	−3·1	−9·0
Summer	−4·8	−7·9	−6·5	−4·4	−3·1	−2·8	−2·7	−3·3	−4·6	−7·5	−10·8	*−13·0*	−11·5	−6·2	+0·1	+6·6	+12·4	+15·4	*+16·2*	+15·3	+12·5	+7·9	+3·5	−0·8

ALL DAYS

Departures from the mean of the 24 hourly values (uncorrected for non-cyclic change)

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DECLINATION (measured positive towards the west)

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
Jan.	−1·77	−1·17	−1·24	−1·22	−1·18	−0·77	−0·50	−0·40	−0·34	+0·06	+0·99	+1·94	+3·14	*+3·61*	+2·96	+2·32	+1·97	+1·63	+0·30	−0·50	−1·66	−2·57	*−3·13*	−2·47
Feb.	−1·77	−0·72	−1·33	−1·95	−2·48	−2·05	−1·50	−1·28	−0·83	+0·07	+1·24	+2·60	+3·82	*+4·30*	+3·93	+2·37	+1·74	+0·80	+0·28	+0·61	−1·21	−1·79	*−2·66*	−2·19
Mar.	−1·53	−1·53	−2·26	−1·81	−2·16	−1·74	−1·52	−0·31	−0·45	*−2·27*	+0·22	+2·31	+4·74	*+5·69*	+5·31	+3·61	+2·35	−0·07	−0·38	−1·01	−1·60	−1·77	−2·15	−1·67
Apr.	−2·37	−2·91	−1·82	−2·78	−2·65	−2·77	−2·95	−2·96	*−3·28*	−2·13	−0·23	+2·81	+6·22	*+7·94*	+7·14	+5·34	+3·44	+1·83	−0·54	−1·23	−0·80	−1·62	−1·72	−1·96
May	−1·82	−1·68	−1·92	−2·72	−3·30	−3·90	−3·92	*−4·07*	−3·75	−2·73	−0·35	+2·73	+4·97	*+5·91*	+5·81	+5·06	+4·21	+3·16	+1·81	+0·61	−0·54	−0·79	−1·20	−1·58
June	−0·88	−1·68	−2·95	−3·68	−4·07	−4·79	*−5·44*	−5·23	−4·73	−2·85	−0·12	+2·57	+4·83	+5·83	*+6·09*	+5·55	+4·35	+3·27	+2·63	+1·46	+0·54	+0·27	−0·16	−0·81
July	−1·80	−2·80	−3·02	−2·21	−3·03	−2·98	−3·37	*−3·91*	−3·34	−2·47	−0·40	+2·17	+4·53	*+5·81*	+5·70	+4·81	+3·85	+2·68	+1·91	+1·06	−0·03	−0·83	−0·82	−1·51
Aug.	−1·41	−1·42	−2·11	−1·85	−2·36	−3·39	*−3·83*	−3·81	−3·59	−2·05	+0·67	+3·71	+6·06	*+6·82*	+6·09	+4·84	+3·11	+1·57	+0·44	−0·78	−1·47	−1·41	−2·17	−1·66
Sept.	−2·67	−1·41	−1·22	−1·39	−1·54	−1·67	−2·21	−2·45	−2·64	−1·56	+0·26	+3·33	+5·83	+6·23	*+6·25*	+5·03	+2·86	+0·36	−1·33	−1·22	−1·78	−2·19	−2·48	−2·39
Oct.	−1·78	+0·13	+0·01	−0·84	−0·23	−0·06	+0·07	+0·02	−0·97	−1·12	+1·01	+3·74	+5·53	*+5·54*	+4·83	+2·40	+0·98	−1·47	−2·11	−2·78	−3·26	*−4·09*	−2·99	−2·56
Nov.	−2·41	−1·45	−0·71	−0·08	+0·15	+0·07	+0·16	+0·38	+0·25	+0·25	+1·49	+2·93	*+4·04*	+3·75	+3·42	+1·89	+1·11	+0·15	−1·17	−1·79	−2·91	−2·59	−3·45	*−3·48*
Dec.	−2·63	−1·28	−0·04	+0·04	+0·17	+0·03	−0·15	+0·05	+0·17	−0·08	+1·02	+1·98	+2·88	*+3·50*	+3·10	+2·03	+1·95	+0·26	−0·25	−0·74	−2·17	−3·05	*−3·46*	−3·33
Year	−1·90	−1·49	−1·55	−1·71	−1·91	−2·00	−2·10	−2·00	−1·96	−1·41	+0·48	+2·73	+4·72	*+5·41*	+5·05	+3·77	+2·66	+1·18	+0·13	−0·53	−1·41	−1·87	*−2·20*	−2·13
Winter	−2·15	−1·15	−0·83	−0·80	−0·83	−0·68	−0·50	−0·31	−0·19	+0·07	+1·19	+2·36	+3·47	*+3·79*	+3·35	+2·15	+1·69	+0·71	−0·21	−0·61	−1·99	−2·50	*−3·17*	−2·87
Equinox	−2·09	−1·43	−1·32	−1·71	−1·65	−1·56	−1·65	−1·43	−1·83	−1·77	+0·31	+3·05	+5·58	*+6·35*	+5·88	+4·09	+2·41	+0·16	−1·09	−1·56	−1·86	*−2·42*	−2·33	−2·15
Summer	−1·48	−1·89	−2·50	−2·61	−3·19	−3·77	−4·14	*−4·25*	−3·85	−2·53	−0·05	+2·79	+5·10	*+6·09*	+5·92	+5·07	+3·88	+2·67	+1·70	+0·59	−0·37	−0·69	−1·09	−1·39

INCLINATION

	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
Jan.	+0·08	+0·04	+0·06	−0·22	−0·57	−0·76	*−0·84*	−0·74	−0·37	+0·10	+0·43	*+0·51*	+0·25	0·00	+0·06	+0·18	+0·13	+0·19	+0·06	+0·29	+0·41	+0·41	+0·22	+0·09
Feb.	+0·01	−0·06	−0·06	−0·17	−0·29	−0·50	*−0·62*	−0·61	−0·18	−0·02	+0·20	*+0·34*	+0·31	+0·03	−0·12	+0·25	+0·21	0·29	+0·14	+0·25	+0·18	*+0·34*	+0·27	−0·18
Mar.	−0·15	−0·45	−0·20	−0·41	−0·54	−0·61	*−0·62*	+0·08	+0·62	+0·94	+1·01	*+1·15*	+0·63	+0·48	+0·22	+0·02	−0·14	+0·17	−0·01	−0·17	−0·55	−0·33	−0·70	−0·42
Apr.	−0·32	−0·51	−0·43	−0·51	−0·55	−0·77	−0·41	−0·05	+0·46	+1·23	+1·84	*+1·99*	+1·44	+0·84	+0·36	+0·12	−0·35	−0·51	−0·52	−0·42	−0·56	−0·69	*−0·89*	−0·81
May	−0·26	−0·34	−0·32	−0·17	−0·23	−0·03	+0·29	+0·57	+0·83	+1·11	*+1·34*	+1·31	+1·06	+0·59	+0·20	−0·29	−0·79	*−1·09*	−1·06	−0·96	−0·61	−0·42	−0·37	−0·34
June	−0·49	−0·42	−0·30	−0·25	−0·05	−0·01	+0·36	+0·78	+1·21	+1·45	*+1·53*	+1·25	+0·92	+0·45	+0·08	−0·56	−0·95	*−1·10*	−1·03	−0·87	−0·67	−0·45	−0·47	−0·39
July	−0·48	−0·44	−0·24	−0·25	−0·26	+0·04	+0·51	+0·58	+1·23	+1·61	*+1·67*	+1·37	+1·00	+0·69	+0·22	−0·30	−0·48	−0·99	−1·29	*−1·31*	−1·09	−0·62	−0·53	−0·62
Aug.	−0·64	−0·61	−0·26	−0·11	−0·15	−0·03	+0·35	+0·80	+1·05	+1·41	*+1·48*	+1·19	+0·61	+0·44	+0·07	−0·25	+0·03	−0·59	−0·75	−0·88	−0·73	*−0·90*	−0·86	−0·67
Sept.	−0·56	−0·55	−0·42	−0·43	−0·26	−0·25	−0·13	+0·19	+0·72	+1·45	*+1·76*	+1·35	+0·85	+0·49	+0·11	+0·01	−0·03	−0·13	−0·37	−0·48	−0·55	−0·78	*−1·18*	−0·83
Oct.	−0·66	−0·42	−0·49	−0·59	−0·74	−0·78	−0·71	−0·45	−0·10	+0·76	*+1·29*	+1·20	+1·06	+0·82	+0·49	+0·36	+0·83	+0·26	+0·01	−0·04	−0·10	−0·42	*−0·79*	−0·76
Nov.	−0·20	−0·31	−0·27	−0·45	−0·84	*−0·88*	−0·81	−0·62	−0·21	+0·38	+0·63	*+0·75*	+0·71	+0·62	+0·63	+0·61	+0·30	+0·26	+0·31	+0·06	+0·06	−0·15	−0·18	−0·40
Dec.	−0·15	−0·02	−0·16	−0·37	−0·46	−0·77	*−0·83*	−0·68	−0·33	+0·10	+0·39	+0·43	*+0·52*	+0·46	+0·41	+0·10	+0·24	+0·38	+0·35	+0·38	+0·27	+0·12	−0·09	−0·29
Year	−0·32	−0·34	−0·26	−0·33	−0·41	−0·45	−0·29	−0·01	+0·41	+0·88	*+1·13*	+1·07	+0·78	+0·49	+0·23	+0·02	−0·08	−0·24	−0·35	−0·35	−0·33	−0·33	−0·46	*−0·47*
Winter	−0·07	−0·08	−0·11	−0·30	−0·54	−0·73	*−0·78*	−0·67	−0·27	+0·13	+0·41	*+0·50*	+0·44	+0·28	+0·25	+0·29	+0·22	+0·28	+0·21	+0·24	+0·23	+0·18	+0·06	−0·19
Equinox	−0·42	−0·48	−0·38	−0·49	−0·52	−0·61	−0·47	−0·06	+0·42	+1·10	*+1·48*	+1·42	+0·99	+0·66	+0·29	+0·12	+0·08	−0·05	−0·22	−0·27	−0·44	−0·56	*−0·89*	−0·71
Summer	−0·46	−0·45	−0·28	−0·20	−0·17	−0·01	+0·37	+0·68	+1·08	+1·40	*+1·51*	+1·27	+0·89	+0·54	+0·14	−0·35	−0·55	−0·95	*−1·03*	−1·00	−0·77	−0·60	−0·56	−0·51

HORIZONTAL FORCE

	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	−1·6	−1·8	−2·2	+1·7	+6·4	+8·8	*+9·9*	+8·2	+3·1	−2·9	*−7·6*	*−8·4*	−4·6	−0·3	0·0	−0·7	+0·2	−0·5	+1·7	−1·5	−2·8	−3·0	−1·3	−0·8
Feb.	−1·8	−2·1	−2·0	+0·2	+2·1	+5·4	*+6·8*	+6·2	−0·1	−2·4	−5·8	*−7·5*	−6·6	−1·4	+2·6	−0·4	+2·4	+1·2	+3·2	+1·5	+1·0	−2·3	−2·6	+2·4
Mar.	−1·6	−0·8	−4·8	−2·0	+1·8	+4·6	+5·8	−3·4	−11·0	−14·4	−16·5	*−19·4*	−11·2	−6·6	+0·4	+5·9	+10·2	+7·6	+9·9	+10·0	*+12·2*	+7·7	+10·9	+4·7
Apr.	+0·3	+0·4	−1·9	+1·9	+4·9	+8·9	+4·2	−1·3	−8·9	−20·5	−29·9	*−32·6*	−25·0	−13·8	−3·1	+4·0	+13·5	*+17·3*	*+17·3*	+14·1	+12·6	+13·3	+13·9	+10·4
May	+3·7	+3·8	+3·5	+2·0	+3·3	+0·3	−4·9	−9·8	−14·4	−19·8	−24·6	*−24·9*	−20·8	−11·9	−3·8	+5·8	+15·0	+21·0	*+21·3*	+19·4	+13·6	+9·4	+7·1	+5·7
June	+6·7	+3·9	+1·8	+1·8	−0·5	−1·1	−6·6	−13·0	−19·8	−24·5	*−26·7*	−23·3	−18·0	−9·1	−1·7	+9·6	+18·3	*+22·1*	+21·5	+18·9	+14·6	+9·9	+8·8	+6·4
July	+4·1	+2·2	+1·1	+2·2	+2·5	−2·0	−9·0	−10·4	−20·2	−26·7	*−28·4*	−24·5	−18·2	−12·0	−2·5	+7·8	+12·1	+20·4	+24·7	*+24·9*	+20·9	+12·8	+9·8	+8·4
Aug.	+6·1	+5·4	+0·6	−0·9	+0·4	−0·8	−5·7	−12·2	−16·4	−22·9	*−25·4*	−22·2	−13·2	−8·4	−0·1	+7·4	+5·3	+15·2	+17·7	*+18·8*	+15·3	+15·0	+12·7	+8·3
Sept.	+3·7	+3·7	+2·2	+2·5	+0·3	+1·3	+0·5	−3·9	−11·6	−22·3	*−27·4*	−21·9	−14·2	−7·1	+0·1	+4·1	+7·5	+10·0	+12·5	+12·0	+11·9	+13·1	*+15·3*	+7·7
Oct.	+3·7	−1·0	+0·1	+2·5	+5·5	+7·1	+7·2	+4·1	−0·6	−12·6	*−20·8*	−18·8	−15·0	−9·3	−1·9	+5·4	−0·8	+7·2	*+8·9*	+6·0	+4·1	+5·0	+8·1	+5·9
Nov.	−0·9	−0·3	+0·3	+2·5	+8·4	*+9·8*	+9·4	+6·7	+1·1	−6·8	−10·3	*−11·2*	−9·6	−6·4	−5·3	−3·6	+0·8	+0·8	+0·1	+2·9	+1·7	+3·7	+2·6	+3·6
Dec.	−0·5	−2·1	−0·3	+2·5	+4·1	+8·9	*+10·1*	+8·0	+2·9	−2·9	−7·1	−7·4	*−7·8*	−5·8	−3·7	+1·6	−0·4	−1·5	−0·8	−1·4	−0·2	+0·6	+1·4	+1·8
Year	+1·8	+0·9	−0·1	+1·4	+3·3	+4·3	+2·3	−1·7	−8·0	−14·9	*−19·2*	−18·5	−13·7	−7·7	−1·6	+3·9	+7·0	+10·1	*+11·5*	+10·5	+8·7	+7·1	+7·2	+5·4
Winter	−1·2	−1·6	−1·1	+1·7	+5·3	+8·2	*+9·1*	+7·3	+1·7	−3·7	−7·7	*−8·6*	−7·1	−3·5	−1·6	−0·8	+0·7	0·0	+1·1	+0·4	−0·1	−0·3	0·0	+1·7
Equinox	+1·5	+0·6	−1·1	+1·2	+3·1	+5·5	+4·4	−1·1	−8·0	−17·5	*−23·7*	−23·2	−16·3	−9·2	−1·1	+4·9	+7·6	+10·5	*+12·1*	+10·5	+10·2	+9·8	+12·1	+7·2
Summer	+5·1	+3·8	+1·7	+1·3	+1·4	−0·9	−6·5	−11·3	−17·7	−23·5	*−26·3*	−23·7	−17·5	−10·3	−2·0	+7·7	+12·7	+19·7	*+21·3*	+20·5	+16·1	+11·8	+9·6	+7·2

DIURNAL INEQUALITIES OF THE GEOGRAPHICAL COMPONENTS OF MAGNETIC FORCE

INTERNATIONAL QUIET DAYS

Departures from the mean of the 24 hourly values (uncorrected for non-cyclic change)

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	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24
NORTH COMPONENT																								
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	−2·7	−3·5	−4·1	−1·9	+0·2	+3·2	+5·5	+4·7	+4·7	−0·1	−5·1	−9·6	−8·6	−3·1	+0·2	+1·9	+3·7	+5·8	+2·8	+4·1	+1·5	+0·2	+0·7	−0·5
Feb.	−3·5	−4·7	−4·0	−2·8	+1·0	+3·0	+5·1	+4·2	−0·9	−4·3	−8·4	−9·4	−7·7	−2·8	0·0	+1·0	+0·8	+1·9	+4·2	+6·1	+6·3	+5·4	+5·8	+3·5
Mar.	+5·5	+5·9	+4·0	+5·5	+7·4	+7·5	+9·6	+7·4	+2·8	−10·5	−20·7	−25·9	−25·0	−22·8	−12·8	−3·0	+1·2	+4·8	+8·1	+12·1	+11·4	+11·6	+7·5	+8·3
Apr.	+5·5	+3·2	+1·0	+2·3	+4·5	+4·2	+5·6	+3·7	−1·3	−15·6	−27·9	−35·2	−31·4	−19·1	−7·3	−1·0	+6·8	+13·9	+16·7	+15·8	+15·5	+13·4	+13·8	+13·0
May	+4·1	+3·6	+3·7	+5·7	+6·6	+6·2	+3·2	−1·1	−7·8	−14·1	−23·0	−26·8	−25·2	−17·4	−9·0	−3·9	+8·5	+14·9	+14·6	+12·1	+12·7	+11·3	+10·3	+10·7
June	+6·6	+6·0	+5·2	+4·3	+5·0	+3·9	+0·7	−5·9	−10·4	−16·5	−19·5	−21·9	−20·1	−15·6	−8·1	+1·9	+6·6	+8·2	+11·8	+13·0	+12·2	+11·5	+10·9	+10·1
July	+4·7	+4·6	+3·2	+6·9	+8·5	+7·6	+3·6	−3·1	−9·5	−19·7	−26·8	−27·1	−27·2	−21·7	−13·4	−0·3	+2·8	+12·7	+18·5	+20·1	+19·3	+14·8	+11·7	+9·8
Aug.	+4·8	+2·8	+2·4	+4·6	+6·3	+4·3	−0·4	−3·4	−8·2	−15·3	−20·4	−21·4	−16·4	−12·7	−10·2	−4·1	+3·6	+11·0	+13·7	+13·1	+12·5	+11·9	+12·3	+9·3
Sept.	+8·7	+6·3	+5·3	+5·9	+7·1	+8·8	+11·5	+9·3	+4·0	−11·7	−23·2	−27·8	−28·9	−19·8	−12·8	−5·4	+1·2	+1·0	+2·3	+8·2	+9·2	+11·7	+14·9	+14·1
Oct.	+3·4	+0·5	+1·2	+1·9	+3·8	+4·9	+6·5	+3·3	−4·7	−16·8	−19·4	−20·0	−16·4	−9·5	−4·1	−0·6	+4·1	+6·0	+7·5	+7·7	+9·9	+10·1	+8·6	+12·1
Nov.	+5·2	−3·2	−3·1	+0·4	+3·1	+4·0	+4·8	+5·4	+2·2	−4·1	−8·5	−11·7	−9·8	−3·2	−2·2	−0·3	−1·9	+2·7	+2·1	−0·6	+4·3	+6·6	+4·8	+3·0
Dec.	−3·6	−3·0	−4·4	−2·1	−0·5	+2·5	+4·7	+4·8	+4·1	+0·1	−4·8	−6·9	−5·2	−2·3	+0·5	+2·6	+2·3	+1·7	+3·7	+2·3	+1·9	+1·3	+1·3	−1·0
Year	+3·2	+1·5	+0·8	+2·6	+4·4	+5·0	+5·0	+2·4	−2·1	−10·7	−17·3	−20·3	−18·5	−12·5	−6·6	−0·9	+3·4	+7·0	+8·9	+9·5	+9·7	+9·1	+8·5	+7·7
Winter	−1·2	−3·7	−3·9	−1·6	+0·9	+3·2	+5·0	+4·8	+2·5	−2·1	−6·7	−9·3	−7·8	−2·8	−0·4	+1·4	+1·2	+3·0	+3·2	+3·1	+3·5	+3·5	+3·1	+1·3
Equinox	+5·8	+4·0	+2·9	+3·9	+5·7	+6·3	+8·3	+5·9	+0·2	−13·7	−22·8	−27·3	−25·5	−17·8	−9·2	−2·4	+3·4	+5·5	+8·7	+10·9	+11·5	+11·7	+11·2	+11·9
Summer	+5·0	+4·2	+3·6	+5·4	+6·5	+5·5	+1·7	−3·4	−9·1	−16·5	−22·4	−24·3	−22·2	−16·8	−10·2	−1·6	+5·4	+11·7	+14·7	+14·6	+14·2	+12·4	+11·2	+10·0
WEST COMPONENT																								
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	−7·5	−5·4	−4·0	−4·0	−4·1	−2·3	−1·4	−3·1	−3·9	−4·2	+0·5	+5·6	+8·7	+10·9	+9·6	+7·2	+6·9	+6·2	+4·3	+3·1	−0·8	−6·5	−9·7	−6·2
Feb.	−4·7	−4·5	−0·2	−1·6	−3·0	−5·2	−6·8	−7·1	−5·7	−1·9	+3·2	+10·1	+11·7	+12·4	+6·8	+1·4	−0·2	+1·5	+2·8	+2·4	+0·9	−1·4	−3·6	−7·1
Mar.	+1·9	−0·9	−5·8	−1·1	−6·0	−6·7	−7·5	−11·5	−17·0	−19·3	−9·9	+4·4	+18·2	+21·3	+20·4	+14·5	+6·9	+4·0	+3·5	−0·6	−3·3	−1·9	−1·6	−1·9
Apr.	−0·8	−1·1	−1·6	−5·9	−9·4	−13·9	−17·9	−20·6	−23·2	−23·3	−15·6	−1·9	+13·8	+24·2	+24·1	+17·8	+13·9	+11·2	+8·3	+6·6	+6·9	+5·6	+3·5	−0·8
May	−2·6	−4·1	−3·9	−6·3	−10·9	−17·0	−21·3	−24·1	−25·5	−20·0	−7·3	+7·7	+19·9	+24·4	+20·9	+15·3	+13·9	+10·6	+8·1	+6·3	+5·4	+4·2	+3·5	+2·6
June	−3·3	−5·3	−8·1	−9·7	−16·4	−22·3	−24·3	−25·4	−25·1	−18·1	−6·7	+7·5	+16·6	+20·6	+22·0	+21·0	+17·4	+15·0	+12·7	+10·9	+8·1	+6·8	+4·8	+1·3
July	−3·4	−6·2	−6·0	−8·6	−13·4	−19·0	−21·5	−22·5	−23·5	−19·7	−12·1	−0·2	+11·7	+20·3	+24·2	+21·7	+18·7	+17·7	+15·3	+11·5	+8·2	+3·8	+2·0	+0·7
Aug.	−7·2	−4·5	−4·9	−7·3	−8·5	−12·6	−16·0	−17·4	−18·7	−12·6	−5·4	+7·1	+16·8	+20·6	+19·5	+15·9	+12·0	+8·8	+7·0	+6·0	+3·3	+2·2	−0·5	−3·7
Sept.	−10·0	−6·5	−3·0	−5·0	−5·7	−5·5	−8·8	−15·6	−20·1	−20·7	−12·4	+14·9	+19·6	+27·6	+28·3	+24·5	+18·1	+9·2	+4·1	+2·4	+0·5	−6·2	−8·4	−11·3
Oct.	−5·2	−4·1	−8·3	−6·7	−6·0	−5·7	−6·3	−11·0	−14·8	−13·0	−0·1	+12·4	+20·3	+20·6	+16·5	+12·6	+9·0	+8·6	+4·9	+1·5	−2·0	−6·8	−7·3	−9·0
Nov.	−3·9	−3·8	−2·7	−1·8	−1·8	−3·1	−3·0	−2·1	−3·3	−3·8	+2·1	+7·3	+9·9	+11·6	+9·7	+7·9	+7·4	+0·7	+1·7	−2·9	−7·4	−6·7	−5·2	−6·8
Dec.	−4·1	−3·0	−1·5	+0·4	−0·4	−0·8	−1·8	−2·1	−2·9	−4·0	−1·5	+2·3	+6·9	+10·1	+8·0	+4·8	+3·6	+2·0	+2·0	−0·1	−2·1	−5·0	−6·0	−4·7
Year	−4·3	−4·1	−4·2	−4·8	−7·1	−9·5	−11·4	−13·5	−15·3	−13·4	−5·4	+5·6	+14·5	+18·7	+17·5	+13·7	+10·7	+7·9	+6·2	+3·9	+1·5	−1·0	−2·4	−3·9
Winter	−5·1	−4·2	−2·1	−1·7	−2·3	−2·8	−3·3	−3·6	−3·9	−3·5	+1·1	+6·3	+9·3	+11·3	+8·5	+5·4	+4·4	+2·6	+2·7	+0·6	−2·3	−4·9	−6·1	−6·2
Equinox	−3·5	−3·1	−4·7	−4·6	−6·8	−7·9	−10·1	−14·7	−18·8	−19·1	−9·5	+5·0	+18·0	+23·5	+22·4	+17·3	+12·0	+8·2	+5·2	+2·5	+0·5	−2·3	−3·4	−5·8
Summer	−4·1	−5·0	−5·7	−8·0	−12·3	−17·7	−20·8	−22·3	−23·2	−17·6	−7·8	+5·5	+16·3	+21·5	+21·7	+18·5	+15·5	+13·0	+10·8	+8·7	+6·2	+4·3	+2·4	+0·3
VERTICAL COMPONENT																								
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	+2·9	+1·7	+0·9	+1·1	+0·3	−0·5	−1·3	−1·9	−2·1	−1·9	−2·3	−1·3	−2·1	−1·1	−0·3	+0·5	+0·3	−0·5	−0·3	+0·1	+1·3	+3·3	+2·3	+0·9
Feb.	+1·4	+1·7	+1·2	+0·9	+0·3	−0·8	−1·7	−2·7	−3·2	−1·5	−1·6	−2·3	−1·0	+0·3	+1·8	+3·1	+2·1	+0·6	+0·5	−0·3	0·0	+0·7	+0·2	+0·3
Mar.	+1·0	0·0	+0·5	−1·0	−2·8	−3·0	−1·4	+1·8	+2·1	−0·2	−4·6	−9·8	−10·6	−7·6	−1·7	+3·2	+4·8	+4·6	+4·2	+5·0	+4·9	+4·2	+3·8	+2·6
Apr.	+2·3	+2·6	+3·4	+3·9	+4·6	+5·4	+4·7	+3·4	+1·4	−2·1	−7·0	−14·4	−17·5	−14·2	−7·4	−2·1	+0·8	+4·4	+5·7	+5·6	+4·4	+4·3	+4·4	+3·4
May	+1·6	+2·0	+2·7	+4·2	+6·0	+5·6	+3·8	+0·8	−2·7	−6·0	−12·6	−16·4	−16·2	−10·4	−6·1	−0·2	+4·0	+7·8	+10·0	+7·8	+5·7	+4·8	+2·6	+1·2
June	+2·5	+2·4	+3·1	+3·9	+4·7	+4·2	+1·5	+0·5	−2·5	−8·0	−10·9	−11·9	−10·3	−5·2	−2·9	−1·1	+1·7	+5·0	+5·7	+4·9	+4·3	+3·6	+2·5	+2·3
July	+3·1	+3·0	+2·4	+3·7	+4·8	+4·4	+2·7	+2·8	+1·4	−6·5	−10·8	−13·6	−13·5	−11·6	−8·0	−4·5	+2·4	+7·2	+7·7	+6·6	+6·2	+4·3	+3·4	+2·4
Aug.	+0·7	+0·6	+1·5	+3·0	+3·4	+3·3	+3·6	+2·6	−0·3	−3·2	−6·9	−13·5	−14·9	−10·2	−3·1	+1·0	+2·8	+4·7	+6·0	+5·4	+5·1	+3·8	+2·7	+2·0
Sept.	−0·2	−0·2	−0·3	0·0	0·0	+0·8	+1·4	+1·8	+0·5	−2·8	−7·2	−12·6	−12·6	−10·0	−8·3	+1·8	+7·2	+11·0	+8·8	+7·4	+5·7	+5·6	+2·6	−0·4
Oct.	+0·7	−2·2	−1·5	−1·3	−0·7	−0·2	−0·1	+0·7	+1·3	+0·2	−4·7	−5·1	−3·5	−1·4	+1·1	+3·3	+3·3	+1·4	+0·9	+1·3	+1·5	+2·6	+2·1	+0·3
Nov.	−7·3	−5·6	−2·9	−2·2	−2·2	−2·1	−2·2	−3·6	−3·7	−3·6	−4·3	−2·6	−0·7	+1·8	+3·9	+5·2	+5·6	+6·1	+4·8	+5·4	+5·1	+3·6	+1·9	−0·4
Dec.	+1·4	−0·6	−0·2	−0·8	−0·2	−0·4	+0·4	−0·4	−0·4	−0·6	−1·0	−2·0	−2·8	−1·6	−0·2	+0·4	+1·0	+1·2	+1·2	+1·2	+1·6	+2·0	+1·8	−1·0
Year	+0·8	+0·5	+0·9	+1·3	+1·5	+1·4	+0·9	+0·5	−0·7	−3·0	−6·2	−8·8	−8·8	−5·9	−2·6	+0·9	+3·0	+4·5	+4·6	+4·2	+3·8	+3·6	+2·5	+1·1
Winter	−0·4	−0·7	−0·3	−0·3	−0·5	−0·9	−1·2	−2·1	−2·3	−1·9	−2·3	−2·1	−1·7	−0·1	+1·3	+2·3	+2·3	+1·9	+1·5	+1·6	+2·0	+2·4	+1·5	−0·1
Equinox	+0·9	+0·1	+0·5	+0·4	+0·3	+0·7	+1·1	+1·9	+1·3	−1·2	−5·9	−10·5	−11·1	−8·3	−4·1	+1·5	+4·0	+5·3	+4·9	+4·8	+4·1	+4·2	+3·2	+1·5
Summer	+2·0	+2·0	+2·4	+3·7	+4·7	+4·4	+2·9	+1·7	−1·0	−5·9	−10·3	−13·9	−13·7	−9·3	−5·0	−1·2	+2·7	+6·2	+7·3	+6·2	+5·3	+4·1	+2·8	+2·0

INTERNATIONAL QUIET DAYS

Departures from the mean of the 24 hourly values (uncorrected for non-cyclic change)

153 ESKDALEMUIR 1942

DECLINATION (measured positive towards the west)

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
Jan.	-1·39	-0·94	-0·63	-0·72	-0·84	-0·61	-0·54	-0·84	-1·01	-0·84	+0·33	+1·58	+2·15	*+2·36*	+1·93	+1·38	+1·24	+0·99	+0·74	+0·44	-0·23	-1·32	*-1·99*	-1·24
Feb.	-0·79	-0·70	+0·15	-0·20	-0·66	-1·19	-1·62	*-1·64*	-1·11	-0·20	+1·03	+2·48	*+2·73*	+2·64	+1·37	+0·24	-0·08	+0·21	+0·38	+0·20	-0·11	-0·54	-0·99	-1·60
Mar.	+0·13	-0·46	-1·36	-0·47	-1·56	-1·70	-1·97	-2·66	*-3·58*	-3·43	-1·06	+2·08	+4·83	*+5·36*	+4·72	+3·07	+1·34	+0·60	+0·33	-0·68	-1·20	-0·91	-0·66	-0·76
Apr.	-0·41	-0·37	-0·37	-1·29	-2·11	-3·02	-3·89	-4·35	*-4·65*	-4·01	-1·89	+1·23	+4·23	*+5·79*	+5·23	+3·65	+2·51	+1·64	+0·91	+0·61	+0·69	+0·53	+0·09	-0·75
May	-0·71	-1·00	-0·95	-1·55	-2·51	-3·74	-4·47	*-4·83*	*-4·83*	-3·42	-0·43	+2·79	+5·19	*+5·74*	+4·65	+3·29	+2·43	+1·48	+0·99	+0·73	+0·51	+0·34	+0·25	+0·05
June	-0·97	-1·35	-1·87	-2·17	-3·55	-4·70	*-4·95*	-4·89	-4·63	-2·91	-0·47	+2·51	+4·29	*+4·89*	+4·83	+4·17	+3·23	+2·68	+2·03	+1·61	+1·09	+0·85	+0·47	-0·19
July	-0·91	-1·46	-1·37	-2·06	-3·10	-4·21	*-4·52*	-4·44	-4·33	-3·10	-1·23	+1·20	+3·63	+5·12	*+5·53*	+4·42	+3·68	+3·01	+2·26	+1·42	+0·79	+0·10	-0·13	-0·30
Aug.	-1·68	-1·05	-1·10	-1·69	-2·01	-2·76	-3·23	-3·37	*-3·42*	-1·85	-0·16	+2·41	+4·16	*+4·77*	+4·42	+3·41	+2·27	+1·28	+0·79	+0·63	+0·10	-0·09	-0·66	-1·17
Sept.	-2·42	-1·60	-0·86	-1·28	-1·48	-1·52	-2·32	-3·60	*-4·26*	-3·68	-1·46	+2·26	+5·30	*+6·50*	+6·34	+5·22	+3·62	+1·82	+0·74	+0·12	-0·32	-1·80	-2·38	-2·94
Oct.	-1·22	-0·85	-1·74	-1·44	-1·40	-1·37	-1·58	-2·38	*-2·80*	-1·87	+0·86	+3·42	*+4·88*	+4·61	+3·54	+2·58	+1·64	+1·47	+0·66	-0·04	-0·86	-1·85	-1·88	-2·38
Nov.	-1·03	-0·63	-0·41	-0·39	-0·51	-0·80	-0·83	-0·67	-0·77	-0·59	+0·81	+2·01	+2·45	*+2·51*	+2·07	+1·63	+1·59	+0·02	+0·25	-0·57	*-1·69*	-1·67	-1·27	-1·51
Dec.	-0·68	-0·48	-0·11	+0·18	-0·06	-0·28	-0·58	-0·64	-0·77	-0·82	-0·08	+0·78	+1·64	*+2·16*	+1·61	+0·86	+0·62	+0·32	+0·24	-0·14	-0·51	-1·08	*-1·28*	-0·90
Year	-1·01	-0·91	-0·89	-1·09	-1·65	-2·16	-2·54	-2·86	*-3·01*	-2·23	-0·31	+2·06	+3·79	*+4·37*	+3·85	+2·83	+2·01	+1·29	+0·86	+0·36	-0·15	-0·62	-0·87	-1·14
Winter	-0·97	-0·69	-0·25	-0·28	-0·52	-0·72	-0·89	-0·95	-0·91	-0·61	+0·52	+1·71	+2·24	*+2·42*	+1·75	+1·03	+0·84	+0·39	+0·41	-0·02	-0·63	-1·15	*-1·38*	-1·31
Equinox	-0·98	-0·82	-1·08	-1·12	-1·64	-1·90	-2·44	-3·25	*-3·82*	-3·25	-0·89	+2·25	+4·81	*+5·57*	+4·96	+3·63	+2·28	+1·38	+0·66	0·00	-0·42	-1·01	-1·21	-1·71
Summer	-1·07	-1·21	-1·32	-1·87	-2·79	-3·85	-4·29	*-4·38*	-4·30	-2·82	-0·57	+2·23	+4·32	*+5·13*	+4·86	+3°·82	+2·90	+2·11	+1·52	+1·10	+0·62	+0·30	-0·02	-0·40

INCLINATION

	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
Jan.	+0·36	+0·35	+0·35	+0·21	+0·05	-0·19	-0·38	-0·31	-0·30	+0·02	+0·27	*+0·51*	+0·39	+0·01	-0·16	-0·22	-0·34	*-0·48*	-0·26	-0·32	-0·06	+0·16	+0·16	+0·15
Feb.	+0·34	+0·42	+0·29	+0·23	-0·01	-0·14	-0·28	-0·24	+0·06	+0·27	*+0·47*	+0·41	+0·31	+0·01	-0·06	-0·01	+0·01	-0·13	-0·31	*-0·45*	-0·43	-0·32	-0·33	-0·12
Mar.	-0·37	-0·37	-0·16	-0·37	-0·47	-0·47	-0·55	-0·27	+0·12	+0·97	*+1·40*	+1·39	+1·11	+0·99	+0·50	+0·06	-0·06	-0·26	-0·48	*-0·67*	-0·58	-0·63	-0·38	-0·45
Apr.	-0·29	-0·13	+0·04	+0·04	-0·04	+0·07	+0·02	+0·15	+0·47	+1·32	+1·89	*+1·98*	+1·43	+0·54	-0·06	-0·25	-0·63	-0·97	*-1·08*	-1·00	-1·01	-0·86	-0·85	-0·76
May	-0·19	-0·13	-0·12	-0·18	-0·12	-0·02	+0·20	+0·45	+0·82	+1·08	*+1·31*	+1·24	+0·96	+0·52	+0·13	+0·02	-0·67	*-0·95*	-0·83	-0·70	-0·78	-0·69	-0·66	-0·71
June	-0·32	-0·26	-0·15	-0·05	+0·03	+0·18	+0·35	+0·77	+1·00	*+1·16*	+1·11	+1·03	+0·82	+0·59	+0·14	-0·47	-0·65	-0·64	-0·82	*-0·90*	-0·82	-0·77	-0·73	-0·62
July	-0·18	-0·13	-0·06	-0·24	-0·25	-0·11	+0·15	+0·60	+1·01	+1·42	*+1·67*	+1·45	+1·28	+0·84	+0·33	-0·41	-0·40	-0·92	-1·25	*-1·33*	-1·23	-0·92	-0·71	-0·59
Aug.	-0·19	-0·10	-0·05	-0·12	-0·21	-0·01	+0·35	+0·54	+0·81	+1·11	*+1·25*	+0·96	+0·46	+0·28	+0·31	+0·06	-0·34	-0·73	*-0·85*	-0·82	-0·74	-0·72	-0·73	-0·51
Sept.	-0·43	-0·32	-0·31	-0·32	-0·38	-0·48	-0·59	-0·34	+0·05	+1·00	*+1·53*	+1·45	+1·30	+0·65	+0·22	+0·04	-0·17	+0·07	+0·01	-0·39	-0·47	-0·54	*-0·79*	-0·77
Oct.	-0·13	-0·03	0·00	-0·06	-0·18	-0·24	-0·34	-0·04	+0·56	*+1·30*	+1·16	+1·01	+0·69	+0·29	+0·05	-0·07	-0·32	-0·48	-0·54	-0·49	-0·58	-0·50	-0·41	*-0·65*
Nov.	*-0·46*	+0·13	+0·17	-0·05	-0·23	-0·27	-0·33	-0·41	-0·19	+0·23	+0·42	*+0·60*	+0·48	+0·09	+0·10	+0·03	+0·15	-0·04	-0·04	+0·21	-0·05	-0·25	-0·20	-0·10
Dec.	+0·33	+0·23	+0·31	+0·11	+0·03	-0·17	-0·27	*-0·29*	-0·24	+0·04	+0·31	*+0·37*	+0·17	-0·04	-0·15	-0·23	-0·18	-0·11	-0·24	-0·12	-0·05	+0·04	+0·05	+0·11
Year	-0·13	-0·03	+0·03	-0·07	-0·15	-0·15	-0·14	+0·05	+0·35	+0·83	*+1·07*	+1·04	+0·79	+0·40	+0·11	-0·12	-0·30	-0·47	-0·56	*-0·58*	-0·57	-0·50	-0·46	-0·43
Winter	+0·15	+0·29	+0·28	+0·12	-0·04	-0·19	-0·31	*-0·31*	-0·17	+0·14	+0·37	*+0·47*	+0·33	+0·02	-0·07	-0·11	-0·09	-0·19	-0·21	-0·17	-0·15	-0·09	-0·08	+0·01
Equinox	-0·31	-0·21	-0·11	-0·18	-0·27	-0·28	-0·37	-0·13	+0·29	+1·15	*+1·49*	+1·46	+1·13	+0·62	+0·17	-0·06	-0·30	-0·41	-0·53	-0·64	*-0·66*	-0·63	-0·61	-0·66
Summer	-0·22	-0·15	-0·09	-0·14	-0·13	+0·01	+0·27	+0·59	+0·91	+1·19	*+1·34*	+1·17	+0·88	+0·56	+0·23	-0·20	-0·52	-0·81	*-0·95*	-0·93	-0·89	-0·77	-0·71	-0·61

HORIZONTAL FORCE

	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	-4·3	-4·6	-4·9	-2·7	-0·7	+2·6	+5·1	+3·9	+3·7	-1·0	-4·9	*-8·1*	-6·5	-0·6	+2·3	+3·5	+5·1	*+7·0*	+3·7	+4·7	+1·3	-1·2	-1·5	-1·9
Feb.	-4·5	-5·6	-3·9	-3·1	+0·3	+1·8	+3·5	+2·5	-2·1	-4·6	*-7·5*	-6·9	-4·9	0·0	+1·5	+1·3	+0·7	+2·2	+4·7	*+6·5*	+6·3	+5·0	+4·9	+1·9
Mar.	+5·8	+5·5	+2·6	+5·1	+5·9	+5·8	+7·7	+4·7	-1·0	-14·5	-22·4	*-24·3*	-20·4	-17·5	-8·0	+0·3	+2·7	+5·6	+8·7	*+11·7*	+10·4	+10·9	+7·0	+7·7
Apr.	+5·2	+2·9	+0·6	+0·9	+2·3	+1·0	+1·5	-0·9	-6·4	-20·3	-30·6	*-34·7*	-27·6	-13·3	-1·8	+2·9	+9·7	+16·0	*+18·1*	+16·9	+16·6	+14·3	+14·2	+12·5
May	+3·4	+2·6	+2·8	+4·2	+4·0	+2·3	-1·6	-6·4	-13·2	-18·2	-24·0	*-24·4*	-20·2	-11·6	-4·2	-0·4	+11·4	*+16·9*	+16·0	+13·2	+13·6	+12·0	+10·8	+11·0
June	+5·7	+4·7	+3·3	+2·1	+1·3	-1·1	-4·7	-11·3	-15·7	-20·1	*-20·5*	-19·7	-15·9	-10·7	-3·1	+6·5	+10·3	+11·3	+14·3	*+15·1*	+13·7	+12·7	+11·7	+10·1
July	+3·8	+3·1	+1·8	+4·9	+5·4	+3·3	-1·2	-7·9	-14·4	-23·5	*-28·8*	-26·5	-24·0	-16·7	-7·8	+4·5	+6·8	+16·3	+21·4	*+22·1*	+20·6	+15·3	+11·8	+9·7
Aug.	+3·1	+1·7	+1·3	+2·9	+4·3	+1·4	-3·9	-7·1	-12·1	-17·7	*-21·1*	-19·3	-12·3	-7·9	-5·7	-0·5	+6·1	+12·6	*+14·9*	+14·1	+12·9	+12·1	+11·9	+8·3
Sept.	+6·3	+4·7	+4·5	+4·7	+5·7	+7·4	+9·3	+5·7	-0·5	-15·9	-25·3	*-26·1*	-23·9	-13·3	-6·3	+0·1	+5·1	+3·0	+3·1	+8·5	+9·1	+10·1	*+12·7*	+11·3
Oct.	+2·2	-0·4	-0·6	+0·4	+2·4	+3·5	+5·0	+0·8	-7·8	*-19·2*	-19·0	-16·8	-11·6	-4·8	-0·4	+2·2	+6·0	+7·7	+8·4	+7·8	+9·2	+8·4	+6·8	*+9·8*
Nov.	+4·2	-4·0	-3·6	0·0	+2·6	+3·2	+4·0	+4·8	+1·4	-4·8	-7·8	*-9·8*	-7·4	-0·6	0·0	+1·4	-0·2	+2·8	+2·4	-1·2	+2·6	*+5·0*	+3·6	+1·4
Dec.	-4·4	-3·6	-4·6	-2·0	-0·6	+2·3	*+4·2*	*+4·2*	+3·4	-0·8	-5·0	*-6·2*	-3·6	0·0	+2·2	+3·6	+3·0	+2·1	+4·0	+2·2	+1·4	+0·2	0·0	-2·0
Year	+2·2	+0·6	-0·1	+1·5	+2·7	+2·8	+2·4	-0·6	-5·4	-13·4	-18·1	*-18·6*	-14·9	-8·1	-2·6	+2·1	+5·6	+8·6	+10·0	*+10·1*	+9·8	+8·7	+7·8	+6·7
Winter	-2·3	-4·5	-4·3	-1·9	+0·4	+2·5	*+4·2*	+3·9	+1·6	-2·8	-6·3	*-7·7*	-5·6	-0·3	+1·5	+2·5	+2·1	+3·5	+3·7	+3·1	+2·9	+2·3	+1·7	-0·1
Equinox	+4·9	+3·2	+1·8	+2·8	+4·1	+4·4	+5·9	+2·6	-3·9	-17·5	-24·3	*-25·5*	-20·9	-12·2	-4·1	+1·4	+5·9	+8·1	+9·6	+11·2	*+11·3*	+10·9	+10·2	+10·3
Summer	+4·0	+3·0	+2·3	+3·5	+3·7	+1·5	-2·9	-8·2	-13·9	-19·9	*-23·6*	-22·5	-18·1	-11·7	-5·2	+2·5	+8·7	+14·3	*+16·7*	+16·1	+15·2	+13·0	+11·5	+9·8

INTERNATIONAL DISTURBED DAYS

Departures from the mean of the 24 hourly values (uncorrected for non-cyclic change)

154 ESKDALEMUIR 1942

NORTH COMPONENT

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	+1·0	+3·0	−3·5	+4·1	*+16·5*	+15·3	+15·5	+6·4	−7·4	−11·2	*−16·1*	−10·5	−5·0	−1·8	−5·4	−7·2	−0·5	+0·3	+7·1	−1·6	−2·2	−0·5	−0·1	+3·7
Feb.	+9·1	−4·5	+2·9	+7·7	+9·6	+13·2	*+18·1*	+10·4	−3·6	−0·6	−5·3	−19·3	*−23·0*	−3·3	+3·4	−11·5	+2·3	−1·4	+11·4	−2·2	+2·0	−3·5	−8·4	−3·8
Mar.	−17·2	−15·4	−13·7	−8·4	−6·8	−4·3	−2·5	−36·3	*−67·1*	−11·4	+3·7	−3·0	+8·1	+19·5	+29·3	+25·2	*+36·0*	+22·7	+24·5	+6·2	+13·6	+4·4	+9·0	−16·1
Apr.	+10·1	+10·4	−13·3	+9·7	+14·3	+26·1	−8·4	−16·7	−20·0	−28·0	−45·4	*−48·3*	−39·7	−11·9	−6·7	+6·9	+25·3	+23·8	+21·1	+17·9	+10·5	+19·8	*+27·8*	+14·6
May	+7·1	+12·9	+11·5	+13·1	+12·8	+1·5	−12·5	−7·7	−14·2	−22·6	−26·7	*−29·2*	−25·4	−15·3	−9·1	+6·7	+14·9	+16·8	+23·3	*+27·5*	+10·1	+5·0	−0·5	+0·1
June	+9·9	+4·2	+5·6	+2·9	+0·5	+3·3	−3·5	−12·0	−18·1	−26·5	*−31·4*	−27·9	−22·3	−9·3	−9·0	+12·3	*+36·7*	+30·1	+28·0	+17·8	+6·5	−3·1	+3·7	+1·7
July	+10·2	+20·1	+10·1	+9·1	+9·5	+4·1	−13·9	−5·9	−27·3	*−35·4*	−34·1	−31·6	−28·1	−21·0	−6·9	+9·3	+13·1	+20·2	*+28·3*	+27·9	+23·3	+12·6	+2·9	+3·6
Aug.	+10·2	+13·8	+7·3	−4·7	+0·9	+3·2	−4·1	−13·9	−18·0	−30·9	*−33·8*	−29·4	−20·1	−20·1	−7·4	+19·4	+7·1	+20·6	+21·7	*+22·3*	+17·2	+13·3	+17·8	+7·7
Sept.	+8·0	+4·3	+2·1	+10·5	+1·9	+3·9	−1·2	−9·9	−25·5	−40·7	*−41·7*	−32·5	−20·6	−13·1	−11·5	+0·4	+10·9	+27·7	+25·9	+16·1	+19·0	+23·4	*+31·8*	+10·7
Oct.	*+23·0*	+8·5	+0·6	+6·3	+14·8	+14·7	+7·3	−7·9	+3·0	−8·5	*−33·7*	−29·5	−24·5	−22·0	−12·8	+27·1	−4·9	+13·6	+19·3	+6·9	−3·4	−12·0	+15·5	−1·3
Nov.	−2·2	+9·9	+13·2	+5·6	*+19·7*	+14·0	+8·9	−2·5	−12·2	−17·2	*−21·2*	−14·8	−18·1	−14·5	−9·5	−10·7	+0·2	+3·5	+0·7	+11·8	+5·5	+10·7	+13·5	+5·9
Dec.	+12·7	+10·7	+5·5	+8·7	+10·0	+21·0	*+23·4*	+11·0	+3·2	−4·9	−18·6	−13·5	*−26·7*	−21·4	−20·6	+7·8	−8·1	−6·5	−4·4	−5·6	+5·7	+8·9	+1·2	+0·3
Year	+6·8	+6·5	+2·4	+5·4	+8·6	+9·6	+2·3	−7·0	*−17·2*	−19·8	*−25·3*	−24·1	−20·4	−11·2	−5·5	+7·1	+11·0	+14·3	*+17·2*	+12·1	+9·0	+6·5	+9·5	+2·3
Winter	+5·2	+4·7	+4·5	+6·5	+13·9	+15·9	*+16·5*	+6·3	−5·0	−8·4	−15·3	−14·5	*−18·1*	−10·2	−8·0	−5·4	−1·5	−1·0	+3·7	+0·6	+2·7	+3·9	+1·6	+1·5
Equinox	+5·9	+1·9	−6·0	+4·5	+6·1	+10·1	−1·2	−17·6	−27·3	−22·1	*−29·3*	−28·3	−19·1	−6·8	−0·4	+14·9	+16·8	+21·9	*+22·7*	+11·8	+9·9	+8·9	+21·0	+1·9
Summer	+9·4	+12·8	+8·7	+5·1	+5·9	+3·0	−8·5	−9·8	−19·4	−28·8	*−31·5*	−29·6	−24·0	−16·4	−8·0	+12·0	+17·9	+21·9	*+25·3*	+23·9	+14·3	+6·9	+5·9	+3·3

WEST COMPONENT

	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	−7·9	−8·4	−7·4	−11·9	−6·6	−1·7	+7·4	+9·0	+10·2	+10·9	+12·3	+10·4	+15·7	*+18·3*	+11·2	+8·1	+9·4	+8·2	+2·2	−6·6	−7·5	−22·9	*−34·0*	−18·4
Feb.	−16·3	−7·9	−24·2	−18·2	−22·9	−12·6	−8·1	−2·8	+0·8	+8·4	+9·2	+16·7	+26·1	+39·3	*+42·3*	+26·0	+26·5	+4·0	−11·1	+1·1	−19·4	−20·9	*−30·5*	−5·4
Mar.	+4·7	−20·6	−13·1	−0·6	+0·1	+3·6	+9·6	*+29·7*	+18·1	*−34·3*	−2·6	−10·2	+7·3	+14·7	+20·0	+9·7	+10·6	−4·1	−2·6	−11·1	−10·3	−8·9	−9·9	+0·2
Apr.	−29·3	*−47·7*	−34·3	−31·9	−20·6	−8·2	−4·5	+11·4	−6·3	−2·5	+0·2	+12·8	+34·7	*+49·9*	+46·4	+38·4	+28·5	+17·2	−9·7	−8·5	+1·1	−14·0	−14·9	−8·4
May	−19·1	−14·7	−21·7	−21·8	*−25·3*	−19·5	−11·7	−10·3	−13·8	−11·7	+0·4	+15·2	+27·3	*+37·2*	+36·6	+36·1	+34·0	+25·6	+15·2	+9·0	−5·2	−15·1	*−25·3*	−21·3
June	+3·6	−8·2	−17·3	−29·4	−23·7	−22·4	−32·1	−30·3	*−32·3*	−24·6	−9·3	+9·7	+24·7	+34·6	+39·6	*+44·6*	+40·7	+30·1	+22·4	+8·9	−3·9	−3·5	−5·9	−17·1
July	−20·7	−26·1	*−26·8*	−10·8	−16·5	−17·1	−19·2	−7·1	−19·3	−13·6	−3·3	+9·7	+24·9	*+32·9*	+32·5	+26·8	+27·7	+16·6	+15·5	+12·0	−2·3	−13·6	−1·1	−1·1
Aug.	−1·6	−1·8	−14·2	−3·9	−8·8	−21·9	−21·8	−16·7	−20·1	−18·9	−1·8	+12·1	+29·4	+35·1	*+43·9*	+37·9	+22·3	+20·9	+4·9	−12·6	*−22·6*	−11·1	−19·1	−9·6
Sept.	*−20·0*	−14·0	−5·9	−11·4	−12·8	−1·0	−7·1	−3·1	−7·1	−5·5	−8·1	+10·3	+29·7	+28·6	*+36·9*	+31·5	+14·9	+2·9	−9·9	−6·5	−11·6	−10·7	−9·2	−10·7
Oct.	−7·9	−3·2	+1·7	−5·7	+9·1	+6·8	+7·2	+20·4	+11·4	+0·2	+0·2	+16·4	+33·8	+41·4	*+46·1*	+28·7	+8·3	−10·5	−9·6	−41·5	−38·8	*−48·4*	−39·1	−26·9
Nov.	−23·1	−1·6	−4·1	+9·9	+21·1	+16·8	+15·9	+18·5	+15·2	+8·8	+9·6	+15·7	*+23·3*	+13·1	+16·0	+4·0	−3·4	−17·0	−16·1	−22·3	−19·0	−11·8	−34·6	*−34·7*
Dec.	−30·2	−10·2	−3·3	+6·1	+11·1	+12·6	+8·0	+6·7	+10·7	+7·1	+11·6	+14·3	+21·1	+23·1	*+23·6*	+8·2	+12·5	−15·0	−13·3	−3·2	−19·4	−27·7	*−31·2*	−23·4
Year	−13·9	−13·7	−14·3	−10·7	−8·0	−5·4	−4·7	+2·1	−2·7	−6·3	+1·5	+11·1	+24·8	+30·7	*+32·9*	+25·0	+19·3	+6·6	−1·0	−6·8	−13·3	−17·4	*−21·3*	−14·8
Winter	−19·3	−7·0	−9·7	−3·5	+0·7	+3·8	+5·8	+7·8	+9·2	+8·8	+10·7	+14·3	+21·5	*+23·4*	+23·2	+11·6	+11·2	−4·9	−9·5	−7·7	−16·3	−20·8	*−32·5*	−20·5
Equinox	−13·1	*−21·3*	−12·9	−12·4	−6·0	+0·3	+1·3	+14·6	+4·0	−10·5	−2·6	+7·4	+26·3	+33·6	*+37·3*	+27·1	+15·6	+1·3	−7·9	−16·9	−14·9	−20·5	−18·3	−11·5
Summer	−9·5	−12·7	−20·0	−16·3	−18·6	−20·2	−21·2	−16·1	*−21·4*	−17·2	−3·5	+11·6	+26·6	+34·9	*+38·1*	+36·3	+31·2	+23·3	+14·5	+4·3	−8·5	−10·8	−12·9	−12·2

VERTICAL COMPONENT

	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	+4·5	−1·7	−5·9	−11·1	−13·3	−12·9	−14·5	*−15·9*	−13·7	−9·1	−4·7	−2·5	−2·9	+0·9	+8·5	+13·5	+10·7	+8·7	+10·7	+13·3	*+15·1*	+12·7	+9·3	+0·3
Feb.	−10·7	−24·2	*−24·8*	−21·5	−20·0	−17·8	−19·5	−20·0	−19·2	−19·5	−20·2	−16·0	−14·9	−10·2	+4·8	+29·1	*+61·4*	+60·8	+52·3	+44·6	+22·2	+5·3	−8·2	−13·8
Mar.	−47·7	*−63·6*	−62·6	−58·5	−30·6	−24·4	−23·3	−18·8	−14·0	+11·1	+6·0	+6·2	+12·5	+23·2	+30·4	+39·5	+46·6	+59·2	*+67·3*	+46·0	+9·0	+9·9	−3·0	−20·4
Apr.	−19·3	−31·2	−48·1	*−52·2*	−38·0	−36·9	−29·8	−31·8	−24·1	−17·4	−10·1	+1·2	+3·7	+15·0	+31·7	+50·6	+64·4	+62·7	+49·8	+36·4	+7·9	+15·2	+6·1	−5·8
May	−2·9	*−18·4*	−10·5	−7·9	−6·7	−7·4	−10·9	−13·7	−10·7	−11·4	−14·5	−13·7	−12·7	−5·8	+3·9	+12·3	+19·7	+27·4	*+28·1*	+24·1	+21·9	+9·2	+3·1	−2·5
June	−2·8	−12·5	−17·0	−14·3	−10·4	−13·7	−11·0	−9·7	−10·4	−10·5	−15·2	−20·3	*−20·6*	−10·1	0·0	+7·9	+24·0	+32·5	*+38·2*	+36·9	+26·8	+14·5	+3·4	−5·7
July	−13·0	−17·4	−12·0	−10·0	−12·2	−12·3	−16·6	−23·0	*−23·2*	−23·0	−20·6	−17·8	−8·2	+1·4	+20·0	*+39·0*	+36·4	+32·3	+27·0	+27·8	+21·0	+14·2	+4·0	−13·8
Aug.	−22·5	*−26·5*	−22·6	−24·9	−21·1	−15·5	−8·7	−6·3	−4·8	−5·9	−8·5	−11·3	−7·3	+0·9	+5·6	+22·7	+36·7	+38·3	*+41·3*	+35·1	+23·6	+6·7	−6·5	−18·5
Sept.	−30·4	−27·1	−22·6	−22·9	−21·1	−13·0	−10·3	−9·5	−6·6	−2·9	−0·4	+4·1	+6·8	+16·3	+19·0	+26·3	*+37·5*	+36·6	+30·3	+22·7	+20·0	+3·5	−22·6	*−33·7*
Oct.	−34·6	−36·0	−36·6	−41·6	−45·0	−31·4	−22·2	−22·0	−21·4	−13·2	−7·8	0·0	+10·8	+12·8	+19·2	+67·8	+80·8	*+96·2*	+91·0	+48·0	+9·2	−27·6	−37·4	*−59·0*
Nov.	−22·6	−35·8	−25·2	−37·4	*−40·4*	−28·9	−17·2	−11·4	−6·0	+1·2	+8·4	+10·4	+17·2	+28·4	+31·4	+36·6	*+38·0*	+31·3	+26·2	+21·0	+9·2	+3·0	−14·4	−23·0
Dec.	−21·7	−16·8	−16·6	−21·1	−23·0	−20·6	−18·9	−14·2	−12·6	−7·5	−4·2	−1·8	+8·1	+14·8	+21·8	+23·5	+19·4	+28·2	+32·5	*+32·8*	+22·0	+10·3	−8·8	*−25·6*
Year	−18·6	−25·9	−25·4	*−26·9*	−23·5	−19·6	−16·9	−16·4	−13·9	−9·0	−7·7	−5·1	−0·6	+7·3	+16·4	+30·7	+39·6	*+42·9*	+41·2	+32·4	+17·3	+6·4	−6·3	−18·5
Winter	−12·6	−19·6	−18·1	−22·8	*−24·2*	−20·1	−17·5	−15·4	−12·9	−8·7	−5·2	−2·5	+1·9	+8·5	+16·6	+25·7	*+32·4*	+32·3	+30·4	+27·9	+17·1	+7·8	−5·5	−15·5
Equinox	−33·0	−39·5	−42·5	*−43·8*	−33·7	−26·4	−21·4	−20·5	−16·5	−5·6	−3·1	+2·9	+8·5	+16·8	+25·1	+46·1	+57·3	*+63·7*	+59·6	+38·3	+11·5	+0·3	−14·2	−29·7
Summer	−10·3	*−18·7*	−15·5	−14·3	−12·6	−12·2	−11·8	−13·2	−12·3	−12·7	−14·7	−15·8	−12·2	−3·4	+7·4	+20·5	+29·2	+32·6	*+33·7*	+31·0	+23·3	+11·1	+1·0	−10·1

INTERNATIONAL DISTURBED DAYS

Departures from the mean of the 24 hourly values (uncorrected for non-cyclic change)

155 ESKDALEMUIR 1942

DECLINATION (measured positive towards the west)

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
Jan.	-1·64	-1·85	-1·35	-2·62	-2·09	-1·05	+0·80	+1·53	+2·41	+2·74	+3·23	+2·59	+3·42	*+3·81*	+2·53	+1·98	+1·93	+1·65	+0·12	-1·27	-1·43	-4·62	*-6·91*	-3·91
Feb.	-3·74	-1·41	-5·06	-4·05	-5·09	-3·16	-2·47	-1·05	+0·32	+1·73	+2·12	+4·27	+6·36	+8·13	*+8·44*	+5·81	+5·29	+0·88	-2·77	+0·33	-4·04	-4·09	*-5·82*	-0·93
Mar.	+1·74	-3·49	-2·04	+0·27	+0·34	+0·93	+2·06	*+7·71*	+6·76	*-6·45*	-0·70	-1·93	+1·12	+2·09	+2·72	+0·81	+0·50	-1·87	-1·66	-2·53	-2·72	-2·01	-2·42	-0·77
Apr.	-6·42	*-10·18*	-6·37	-6·92	-4·84	-2·86	-0·52	+3·08	-0·37	+0·78	+2·12	+4·82	+8·88	*+10·70*	+9·75	+7·50	+4·64	+2·40	-2·94	-2·56	-0·25	-3·76	-4·30	-2·38
May	-4·21	-3·58	-4·92	-5·03	*-5·72*	-4·02	-1·81	-1·74	-2·16	-1·35	+1·30	+4·42	+6·69	*+8·24*	+7·84	+7·03	+6·22	+4·44	+2·03	+0·58	-1·52	-3·29	-5·12	-4·32
June	+0·28	-1·86	-3·77	-5·90	-4·84	-4·70	*-6·36*	-5·60	-5·73	-3·78	-0·46	+3·24	+6·04	+7·44	+8·45	*+8·50*	+6·60	+4·74	+3·28	+1·00	-1·09	-0·58	-1·36	-3·54
July	-4·67	*-6·21*	-5·90	-2·61	-3·79	-3·65	-3·27	-1·17	-2·68	-1·15	+0·89	+3·41	+6·33	*+7·63*	+6·92	+5·01	+5·03	+2·45	+1·85	+1·17	-1·52	-3·33	-0·35	-0·39
Aug.	-0·78	-0·99	-3·21	-0·58	-1·83	-4·59	-4·24	*-2·75*	-3·27	-2·44	+1·17	+3·79	+6·88	+8·05	*+9·25*	+6·80	+4·21	+3·31	0·00	-3·57	*-5·37*	-2·86	-4·69	-2·29
Sept.	*-4·42*	-3·03	-1·30	-2·79	-2·69	-0·38	-1·39	-0·19	-0·28	+0·73	+0·26	+3·57	+6·94	+6·41	*+8·02*	+6·37	+2·53	-0·68	-3·19	-2·05	-3·22	-3·25	-3·32	-2·65
Oct.	-2·65	-1·04	+0·32	-1·45	+1·18	+0·72	+1·13	+4·50	+2·18	+0·43	+1·58	+4·68	+7·99	+9·42	*+9·96*	+4·61	+1·92	-2·76	-2·83	-8·76	-7·74	*-9·31*	-8·66	-5·42
Nov.	-4·60	-0·77	-1·44	+1·75	+3·41	+2·78	+2·83	+3·87	+3·64	+2·57	+2·92	+3·87	*+5·56*	+3·33	+3·68	+1·31	-0·71	-3·62	-3·31	-5·07	-4·12	-2·89	*-7·66*	-7·33
Dec.	*-6·71*	-2·56	-0·91	+0·85	+1·81	+1·60	+0·57	+0·85	+2·03	+1·66	+3·21	+3·51	+5·49	+5·66	*+5·73*	+1·31	+2·91	-2·76	-2·49	-0·39	-4·19	-6·02	-6·39	-4·77
Year	-3·15	-3·08	-3·00	-2·42	-2·01	-1·53	-1·06	+0·75	+0·24	-0·38	+1·47	+3·35	+5·97	+6·74	*+6·94*	+4·75	+3·42	+0·68	-0·99	-1·93	-3·10	-3·83	*-4·75*	-3·10
Winter	-4·17	-1·65	-2·19	-1·02	-0·49	+0·04	+0·43	+1·30	+2·10	+2·17	+2·87	+3·56	+5·21	*+5·23*	+5·09	+2·60	+2·35	-0·96	-2·11	-1·60	-3·45	-4·41	*-6·69*	-4·23
Equinox	-2·94	-4·43	-2·35	-2·72	-1·50	-0·40	+0·32	+3·77	+2·07	-1·13	+0·81	+2·79	+6·23	+7·15	*+7·61*	+4·82	+2·40	-0·73	-2·65	-3·97	-3·48	-4·58	*-4·67*	-2·42
Summer	-2·35	-3·16	*-4·45*	-3·53	-4·05	-4·24	-3·92	-2·81	-3·46	-2·18	+0·73	+3·71	+6·49	+7·84	*+8·11*	+6·83	+5·51	+3·73	+1·79	-0·21	-2·37	-2·51	-2·88	-2·63

INCLINATION

	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
Jan.	+0·13	-0·03	+0·36	-0·07	-0·98	-0·99	*-1·16*	-0·60	+0·29	+0·53	*+0·82*	+0·51	+0·04	-0·18	+0·18	+0·36	-0·10	-0·15	-0·51	+0·20	+0·29	+0·45	+0·57	+0·05
Feb.	-0·32	+0·45	+0·20	-0·21	-0·28	-0·70	*-1·11*	-0·71	+0·14	-0·13	+0·17	+0·96	*+1·10*	-0·36	-0·81	+0·45	-0·49	+0·05	-0·57	+0·12	+0·15	+0·56	+1·01	+0·34
Mar.	+1·08	+1·32	+1·10	+0·53	+0·38	+0·15	-0·01	+1·99	*+4·19*	+1·25	-0·32	+0·11	-0·90	-1·68	-2·27	-1·72	*-2·40*	-1·31	-1·47	-0·12	-0·62	-0·05	-0·35	+1·11
Apr.	-0·17	+0·09	+1·47	-0·07	-0·52	-1·46	+0·74	+1·01	+1·44	+1·82	*+2·81*	+2·62	+1·65	-0·31	-0·43	-1·08	*-2·07*	-1·71	-1·10	-0·91	-0·60	-0·99	-1·49	-0·75
May	-0·15	-0·58	-0·37	-0·43	-0·32	+0·33	+1·09	+0·68	+1·07	*+1·51*	+1·44	+1·29	+0·87	+0·20	-0·09	-0·98	-1·38	-1·29	-1·50	*-1·75*	-0·45	+0·01	+0·47	+0·34
June	-0·64	-0·09	-0·04	+0·33	+0·43	+0·22	+0·74	+1·25	+1·60	+1·91	*+1·93*	+1·40	+0·85	-0·03	-0·07	-1·50	*-2·97*	-2·30	-2·03	-1·18	-0·26	+0·35	-0·09	+0·20
July	-0·69	-1·37	-0·57	-0·69	-0·68	-0·33	+0·79	-0·08	+1·50	*+1·96*	+1·78	+1·49	+1·28	+0·93	+0·47	-0·04	-0·36	-0·77	*-1·42*	-1·33	-0·97	-0·27	-0·08	-0·56
Aug.	-1·21	*-1·54*	-0·83	-0·25	-0·46	-0·27	+0·38	+1·00	+1·36	*+2·17*	+2·04	+1·47	+0·71	+0·82	-0·02	-1·27	+0·11	-0·71	-0·47	-0·41	-0·21	-0·54	-1·05	-0·82
Sept.	-0·98	-0·75	-0·61	-1·09	-0·46	-0·57	-0·07	+0·46	+1·61	+2·69	*+2·85*	+2·09	+1·09	+0·84	+0·69	+0·16	-0·01	-0·95	-0·81	-0·40	-0·58	-1·29	*-2·51*	-1·38
Oct.	*-2·25*	-1·41	-0·97	-1·36	-2·22	-1·84	-1·14	-0·33	-0·89	+0·23	+2·02	+1·70	+1·38	+1·15	+0·64	-0·52	*+2·21*	+1·65	+1·13	+1·35	+1·02	+0·82	-1·37	-0·98
Nov.	-0·07	-1·51	-1·43	-1·44	*-2·61*	-1·88	-1·25	-0·39	+0·43	+1·03	+1·46	+1·00	+1·28	+1·47	+1·17	*+1·55*	+0·98	+0·80	+0·84	+0·08	+0·15	-0·46	-0·73	-0·45
Dec.	-0·93	-0·97	-0·72	-1·18	-1·39	-2·07	*-2·13*	-1·17	-0·68	+0·03	+0·95	+0·63	*+1·64*	+1·43	+1·55	-0·05	+0·83	+1·35	+1·29	+1·23	+0·46	+0·08	+0·16	-0·31
Year	-0·70	-0·86	-0·58	-0·86	-1·03	*-1·04*	-0·50	+0·02	+0·83	+1·17	*+1·45*	+1·30	+0·96	+0·46	+0·29	-0·07	-0·03	+0·03	-0·10	+0·11	+0·03	-0·02	-0·47	-0·39
Winter	-0·37	-0·69	-0·60	-0·94	-1·52	-1·60	*-1·61*	-0·91	-0·13	+0·21	+0·72	+0·68	+0·92	+0·53	+0·59	+0·82	+0·74	*+0·94*	+0·65	+0·77	+0·49	+0·25	+0·24	-0·18
Equinox	-1·01	-0·79	-0·47	-1·20	-1·15	-1·32	-0·47	+0·44	+1·33	+1·47	*+1·88*	+1·82	+1·08	+0·37	+0·10	-0·24	+0·09	+0·12	+0·10	+0·42	-0·15	-0·28	*-1·46*	-0·70
Summer	-0·73	*-1·12*	-0·66	-0·45	-0·43	-0·20	+0·58	+0·56	+1·29	*+1·83*	+1·76	+1·38	+0·88	+0·48	+0·15	-0·81	-0·91	-0·98	-1·04	-0·87	-0·24	-0·02	-0·18	-0·28

HORIZONTAL FORCE

	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	-0·8	+1·1	-5·0	+1·4	+14·6	+14·5	*+16·8*	+8·2	-5·0	-8·5	*-13·0*	-8·0	-1·4	+2·3	-2·8	-5·2	+1·6	+2·1	+7·4	-3·0	-3·8	-5·5	-7·6	-0·4
Feb.	+5·3	-6·1	-2·5	+3·5	+4·3	+10·1	*+15·9*	+9·5	-3·3	+1·3	-3·1	-15·1	*-16·7*	+5·5	+12·7	-5·5	+8·1	-0·5	+8·7	-1·9	-2·3	-8·1	-14·9	-4·9
Mar.	-15·7	-19·6	-16·2	-8·3	-6·6	-3·4	-0·3	-28·8	*-61·4*	-18·7	+3·0	-5·2	+9·5	+22·2	+33·0	+26·7	*+37·4*	+21·2	+23·3	+3·6	+11·0	+2·3	+6·6	-15·6
Apr.	+3·4	-0·4	-20·5	+2·4	+9·4	+23·6	-9·2	-13·8	-20·9	-27·8	*-44·2*	*-44·2*	-31·0	-0·6	+3·7	+15·2	*+31·0*	+27·0	+18·4	+15·6	+10·5	+16·2	+23·8	+12·4
May	+2·8	+9·4	+6·5	+8·0	+7·0	-2·8	-14·8	-9·8	-16·9	-24·6	*-26·0*	-25·2	-18·8	-6·8	-0·9	+14·4	+22·0	+22·0	+26·0	*+28·8*	+8·7	+1·6	-6·0	-4·6
June	+10·4	+2·3	+1·7	-3·4	-4·7	-1·7	-10·4	-18·3	-24·7	-31·2	*-32·7*	-25·1	-16·4	-1·5	-0·1	+21·8	*+44·7*	+35·9	+32·2	+19·3	+5·5	-3·8	+2·3	-2·1
July	+5·4	+13·9	+4·0	+6·5	+5·6	+0·3	-17·8	-7·3	-30·8	*-37·5*	-34·0	-28·7	-22·0	-13·3	+0·4	+14·9	+18·8	+23·3	*+31·0*	+29·9	+22·2	+9·3	+2·6	+3·3
Aug.	+9·6	+13·1	+4·0	-5·4	-1·0	-1·7	-8·8	-17·2	-22·0	*-34·3*	-33·4	-26·0	-13·2	-11·9	+2·4	*+27·2*	+11·8	+24·7	+22·2	+19·0	+11·8	+10·5	+13·2	+5·4
Sept.	+3·4	+1·1	+0·8	+7·7	-0·9	+3·6	-2·7	-10·3	-26·4	-40·9	*-42·4*	-29·5	-13·6	-6·5	-3·2	+7·3	+13·9	+27·6	+23·1	+14·3	+16·0	+20·5	*+29·0*	+8·1
Oct.	*+20·7*	+7·6	+1·0	+4·9	+16·4	+15·8	+8·7	-3·2	+5·4	-8·3	*-32·8*	-25·2	-16·5	-12·4	-2·4	+32·7	-3·0	+11·0	+16·7	-2·4	-11·8	-22·3	+6·6	-7·2
Nov.	-7·2	+9·3	+12·0	+7·6	*+23·8*	+17·3	+12·2	+1·6	-8·6	-14·9	*-18·6*	-11·0	-12·6	-11·3	-5·8	-9·6	-0·6	-0·3	-2·8	+6·6	+1·2	+7·9	+5·6	-1·8
Dec.	+5·8	+8·2	+4·7	+9·8	+12·2	+23·2	*+24·6*	+12·2	+5·5	-3·2	-15·6	-10·0	*-21·4*	-15·8	-14·9	+9·4	-5·2	-9·6	-7·2	-6·2	+1·3	+2·6	-5·6	-4·8
Year	+3·6	+3·3	-0·8	+2·9	+6·7	+8·2	+1·2	-6·4	-17·4	-20·7	*-24·4*	-21·1	-14·5	-4·2	+1·8	+12·4	+15·0	+15·4	*+16·6*	+10·3	+5·9	+2·6	+4·6	-1·0
Winter	+0·8	+3·1	+2·3	+5·6	+13·7	+16·3	*+17·4*	+7·9	-2·9	-6·3	-12·6	-11·0	*-13·0*	-4·8	-2·7	-2·7	+1·0	-2·1	+1·5	-1·1	-0·9	-0·8	-5·6	-3·0
Equinox	+2·9	-2·8	-8·7	+1·7	+4·6	+9·9	-0·9	-14·0	-25·8	-23·9	*-29·1*	-26·0	-12·9	+0·7	+7·8	+20·5	+19·8	*+21·7*	+20·4	+7·8	+6·4	+4·2	+16·5	-0·6
Summer	+7·1	+9·7	+4·1	+1·4	+1·7	-1·5	-12·9	-13·1	-23·6	*-31·9*	-31·5	-26·3	-17·6	-8·4	+0·5	+19·6	+24·3	+26·5	+27·9	+24·3	+12·1	+4·4	+3·0	+0·5

RANGE OF MEAN DIURNAL INEQUALITIES FOR THE MONTHS, YEAR AND SEASONS OF 1942
The ranges are derived from the diurnal inequalities printed in Tables 150 to 155

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	All days			Quiet days			Disturbed days			All days			Quiet days			Disturbed days		
	N	W	V	N	W	V	N	W	V	D	I	H	D	I	H	D	I	H
	γ	γ	γ	γ	γ	γ	γ	γ	γ	′	′	γ	′	′	γ	′	′	γ
Jan.	20.5	31.9	16.6	15.4	20.6	5.6	32.6	52.3	31.0	6.74	1.35	18.3	4.35	0.99	15.1	10.72	1.98	29.8
Feb.	18.7	33.0	23.0	15.7	19.5	6.3	41.1	72.8	86.2	6.96	0.96	14.3	4.37	0.92	14.0	14.26	2.21	32.6
Mar.	35.0	39.0	49.5	38.0	40.6	15.6	103.1	64.0	130.9	7.96	1.77	31.6	8.94	2.07	36.0	14.16	6.59	98.8
Apr.	52.3	51.5	49.0	51.9	47.5	23.2	76.1	97.6	116.6	11.22	2.88	49.9	10.44	3.06	52.8	20.88	4.88	75.2
May	46.1	47.6	30.0	41.7	49.9	26.4	56.7	62.5	46.5	9.98	2.43	46.2	10.57	2.26	41.3	13.96	3.26	54.8
June	44.1	55.6	30.1	34.9	47.4	17.6	68.1	76.9	58.8	11.53	2.63	48.8	9.84	2.06	35.6	14.86	4.90	77.4
July	50.5	46.8	27.5	47.3	47.7	21.3	63.7	59.7	62.2	9.72	2.98	53.3	10.05	3.00	50.9	13.84	3.38	68.5
Aug.	44.8	50.6	30.1	35.1	39.3	20.9	56.1	66.5	67.8	10.65	2.38	44.2	8.19	2.10	36.0	14.62	3.71	61.5
Sept.	44.5	44.2	34.8	43.8	49.0	23.6	73.5	56.9	71.2	8.92	2.94	42.7	10.76	2.32	38.8	12.44	5.36	71.4
Oct.	33.4	42.0	51.0	32.1	35.4	8.4	56.7	94.5	155.2	9.63	2.08	29.7	7.68	1.95	29.0	19.27	4.46	53.5
Nov.	23.5	32.5	27.8	18.3	19.0	13.4	40.9	58.0	78.4	7.52	1.63	21.0	4.20	1.06	14.8	13.22	4.16	42.4
Dec.	20.6	31.0	20.0	11.7	16.1	4.8	50.1	54.8	58.4	6.96	1.35	17.9	3.44	0.66	10.4	12.44	3.77	46.0
Year	32.0	34.6	28.9	30.0	34.0	13.4	42.5	54.2	69.8	7.61	1.60	30.7	7.38	1.65	28.7	11.69	2.49	41.0
Winter	20.3	31.9	19.3	14.3	17.5	4.7	34.6	55.9	56.6	6.96	1.28	17.7	3.80	0.78	11.9	11.92	2.55	30.4
Equinox	40.1	39.9	44.9	39.2	42.6	16.4	52.0	58.6	107.5	8.77	2.37	35.8	9.39	2.15	36.8	12.28	3.34	50.8
Summer	45.5	49.7	29.2	39.0	44.9	21.2	56.8	59.5	52.4	10.34	2.54	47.6	9.51	2.29	40.3	12.56	2.95	59.8

NON-CYCLIC CHANGE

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	All days			Quiet days			Disturbed days		
	H	D	V	H	D	V	H	D	V
	γ	′	γ	γ	′	γ	γ	′	γ
Jan.	+0.2	-0.01	-0.5	+3.0	+0.47	-3.2	-0.2	-0.18	-10.9
Feb.	-0.8	+0.02	+0.3	+5.7	-0.09	-1.9	-10.4	+2.93	-7.8
Mar.	+1.0	-0.08	0.0	+2.8	-0.99	-1.9	-14.5	-0.21	-1.9
Apr.	+0.1	-0.03	+0.2	+5.4	-0.21	0.0	+5.3	+4.03	+5.4
May	+0.1	+0.02	-0.3	+6.6	+0.50	-1.6	-9.8	-1.23	-0.7
June	0.0	-0.14	-0.2	+4.6	+0.19	-0.8	-9.8	-3.05	-7.7
July	-0.1	+0.06	0.0	+4.0	+0.04	-2.6	-8.6	+3.32	-11.0
Aug.	-0.3	-0.07	+0.2	+3.7	+0.36	+0.8	-9.4	-1.62	-7.3
Sept.	+0.1	+0.01	0.0	+2.9	+0.63	-0.8	-10.3	-0.26	-4.7
Oct.	-0.5	+0.01	+0.3	+5.1	-0.89	-2.6	-12.4	-2.01	-21.2
Nov.	+0.1	-0.04	+0.1	-2.4	-0.49	+2.4	-7.4	-1.54	-5.4
Dec.	+0.3	-0.03	0.0	+3.5	+0.34	-2.4	-4.4	+1.18	-5.2
Year	0.0	-0.02	0.0	+3.7	-0.01	-1.2	-7.7	+0.11	-6.5
Winter	-0.1	-0.01	0.0	+2.5	+0.06	-1.3	-5.6	+0.60	-7.3
Equinox	+0.2	-0.02	+0.1	+4.1	-0.37	-1.3	-8.0	+0.39	-5.6
Summer	-0.1	-0.03	-0.1	+4.7	+0.27	-1.1	-9.4	-0.65	-6.7

"Winter" comprises the four months January, February, November, December; "Equinox" the months March, April, September, October; and "Summer" May to August.

MEAN MONTHLY AND ANNUAL VALUES OF TERRESTRIAL MAGNETIC ELEMENTS
For all, a, quiet, q and disturbed, d, days for H, D and V and for all days for N, W, I and T

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	Horizontal force			Declination (west)			Vertical force			North component all days	West component all days	Inclination (north) all days		Total force all days
	a	q	d	a	q	d	a	q	d					
	16,000γ +			12° +			44,000γ +							
	γ	γ	γ	′	′	′	γ	γ	γ	γ	γ	°	′	γ
Jan.	514	520	505	44.1	43.9	44.2	1056	1051	1062	16107	3640	69	52.3	47987
Feb.	515	519	504	43.2	43.5	43.0	1051	1049	1063	16110	3637	69	52.1	47983
Mar.	509	517	494	42.5	42.4	42.2	1053	1051	1064	16105	3632	69	52.5	47983
Apr.	513	517	501	41.4	41.1	41.9	1051	1052	1051	16109	3627	69	52.2	47982
May	528	530	527	40.5	40.5	40.3	1048	1048	1046	16125	3627	69	51.1	47984
June	534	537	537	40.2	40.4	40.1	1048	1047	1049	16131	3626	69	50.7	47986
July	525	529	525	39.6	39.8	39.9	1043	1042	1044	16123	3622	69	51.2	47979
Aug.	521	521	519	38.9	38.7	38.8	1045	1045	1047	16120	3617	69	51.5	47979
Sept.	515	519	511	38.3	38.3	38.5	1047	1048	1045	16115	3614	69	52.0	47979
Oct.	511	520	501	37.2	37.8	37.0	1058	1057	1062	16112	3607	69	52.5	47988
Nov.	513	520	499	36.3	36.7	34.8	1064	1061	1063	16115	3604	69	52.5	47994
Dec.	515	523	505	35.7	35.8	35.3	1065	1062	1070	16118	3601	69	52.4	47996
Year	518	523	511	39.8	39.9	39.7	1053	1051	1055	16116	3621	69	51.9	47985

HARMONIC COMPONENTS OF THE DIURNAL INEQUALITY OF MAGNETIC FORCE

Values of a_n, b_n in the series $\Sigma(a_n \cos 15nt + b_n \sin 15nt)$, t being reckoned in hours from midnight G.M.T.

Longitude of Eskdalemuir Observatory, 3°12′W.

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	North component								West component								Vertical component							
	a_1	b_1	a_2	b_2	a_3	b_3	a_4	b_4	a_1	b_1	a_2	b_2	a_3	b_3	a_4	b_4	a_1	b_1	a_2	b_2	a_3	b_3	a_4	b_4
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
ALL DAYS																								
Jan.	+3·2	+3·6	-4·5	-0·3	+1·7	-2·6	+0·6	+0·6	-10·5	-2·9	-0·8	+5·0	-0·2	-0·1	+1·3	+1·8	+1·7	-7·5	-0·5	-1·1	-0·4	-0·3	-0·9	-0·8
Feb.	+3·5	+1·7	-4·6	-0·8	+1·9	-1·7	+0·4	+0·3	-10·8	-6·1	+2·3	+4·2	-1·0	-0·1	+0·4	+3·0	+1·5	-10·7	-4·8	-0·6	+0·3	+0·1	+0·1	-1·2
Mar.	+10·0	-4·6	-7·4	-0·7	+1·5	-2·9	+0·4	-1·0	-10·4	-8·0	+2·3	+6·7	+0·6	-5·1	+0·6	+3·0	-4·7	-17·9	-7·3	-4·0	+2·9	+0·8	+0·8	-1·0
Apr.	+16·6	-4·9	-12·7	-1·4	+4·2	-2·5	+0·2	-0·9	-11·4	-14·5	+3·0	+10·1	-0·7	-6·2	+0·1	+1·3	-2·2	-16·1	-10·0	-3·3	+2·0	-0·1	+1·0	-2·3
May	+14·6	-6·9	-10·4	+0·8	+1·5	+1·1	+0·1	-0·2	-8·0	-18·6	+2·3	+9·1	-1·3	-1·3	+1·1	+0·9	+6·3	-7·6	-7·0	-1·1	+0·8	0·0	-0·4	-0·2
June	+14·4	-8·4	-9·6	+2·5	+1·7	+0·3	+0·9	-0·1	-6·5	-23·5	+4·3	+8·0	-1·2	-1·6	+1·4	+0·2	+4·7	-9·5	-6·8	-2·3	+0·9	+0·2	+0·3	-0·2
July	+16·2	-10·2	-9·7	+0·7	-0·1	-0·1	+0·4	+0·8	-7·5	-18·5	+1·0	+7·7	-2·0	-3·1	+1·2	+0·6	+2·4	-10·3	-7·2	-1·6	+0·2	-0·9	-1·4	-1·4
Aug.	+15·4	-8·5	-7·3	-0·3	+0·8	-1·7	+0·3	+1·0	-10·0	-15·1	+5·7	+10·1	-2·5	-2·8	+1·2	+0·9	+0·8	-9·7	-9·0	-1·6	+1·6	+0·5	-1·0	-0·1
Sept.	+14·7	-6·0	-7·1	-0·4	+2·2	-3·0	+0·1	+1·0	-11·0	-9·7	+3·7	+10·7	-1·8	-4·8	-0·5	+1·3	-4·1	-11·5	-8·0	-1·4	+0·5	+1·9	-0·7	-0·1
Oct.	+10·9	-2·2	-8·1	-1·6	+3·5	-2·6	0·0	+0·2	-11·3	+10·2	+3·5	+9·6	-0·9	-3·8	+1·6	+3·2	-9·9	-17·9	-8·9	+1·9	+2·4	+1·7	0·0	-0·9
Nov.	+7·7	+2·0	-5·4	-1·8	+1·6	-2·5	+0·6	-0·2	-11·5	+1·4	-0·2	+5·8	-1·7	-1·7	+0·4	+1·0	-4·9	-11·5	-2·9	-0·1	+0·1	-0·9	-0·9	-0·3
Dec.	+4·9	+3·0	-3·9	-1·8	+2·4	-2·4	+0·3	-0·4	-10·4	+0·2	-1·8	+6·1	-1·4	-0·5	-0·4	+1·3	-1·6	-9·4	-3·2	-0·9	-1·0	-0·1	-1·1	+0·6
Year	+11·0	-3·4	-7·6	-0·4	+1·9	-1·7	+0·4	+0·1	-9·9	-9·5	+2·1	+7·8	-1·2	-2·5	+0·7	+1·5	-0·8	-11·6	-6·3	-1·3	+0·9	+0·2	-0·3	-0·7
Winter	+4·8	+2·6	-4·6	-1·1	+1·9	-2·3	+0·5	+0·1	-10·8	-1·9	-0·1	+5·3	-1·1	-0·6	+0·4	+1·8	-0·8	-9·8	-2·8	-0·7	-0·2	-0·3	-0·7	-0·4
Equinox	+13·1	-4·4	-8·9	-0·9	+2·8	-2·8	+0·1	-0·2	-11·1	-7·9	+3·1	+9·3	-0·7	-5·0	+0·5	+2·2	-5·2	-15·9	-8·6	-1·7	+1·9	+1·1	+0·3	-1·1
Summer	+15·1	-8·5	-9·2	+1·0	+1·0	-0·1	+0·5	+0·4	-8·0	-18·9	+3·3	+8·7	-1·7	-2·2	+1·2	+0·7	+3·5	-9·3	-7·5	-1·7	+0·9	-0·1	-0·6	-0·5
QUIET DAYS																								
Year	+10·1	-1·4	-7·1	-0·7	+2·4	-1·3	-0·3	+0·5	-4·6	-10·3	+2·4	+6·6	-2·4	-2·2	+0·8	+1·3	+3·8	-1·9	-3·4	-0·6	+1·1	0·0	-0·7	-0·3
Winter	+2·1	0·0	-3·9	-1·2	+1·9	-1·7	-0·4	+0·5	-5·1	-2·8	+0·6	+3·3	-1·9	-0·4	+0·6	+1·1	+0·8	-2·3	-0·6	+0·1	+0·1	-0·5	-0·5	-0·4
Equinox	+13·8	-0·3	-8·8	-1·2	+4·2	-1·8	-0·8	+1·1	-5·1	-11·8	+2·4	+9·0	-2·5	-4·2	+1·4	+2·1	+4·1	-1·9	-4·0	-1·5	+2·1	+0·5	-1·1	-0·6
Summer	+14·4	-3·9	-8·5	+0·3	+1·1	-0·4	+0·3	0·0	-3·5	-16·6	+4·1	+7·6	-2·9	-2·0	+0·5	+0·8	+6·5	-1·3	-5·7	-0·4	+1·2	+0·1	-0·4	0·0
DISTURBED DAYS																								
Year	+12·7	-9·1	-9·6	+3·1	+1·3	-2·3	+1·5	-1·2	-18·0	-7·4	+0·3	+9·3	+1·4	-4·1	+0·7	+2·6	-8·7	-30·7	-11·6	-1·7	+0·7	+2·2	+0·7	-1·0
Winter	+8·7	+2·5	-7·4	+0·1	+0·9	-3·5	+1·4	-0·2	-19·1	+3·7	-1·0	+6·8	-0·9	-1·0	-0·9	+3·1	-7·1	-27·1	-7·1	-1·5	+0·1	+1·5	-0·6	+0·1
Equinox	+12·9	-15·1	-9·9	+4·7	+1·5	-4·7	+2·4	-4·1	-19·0	-3·5	0·0	+9·8	+4·2	-8·6	+0·5	+3·6	-19·7	-40·7	-15·6	-1·2	+1·7	+4·3	+3·7	-2·2
Summer	+16·3	-14·5	-11·5	+4·6	+1·4	+1·2	+0·8	+0·5	-15·9	-22·6	+1·9	+11·3	+0·8	-2·6	+2·5	+1·0	+0·8	-24·3	-12·2	-2·6	+0·3	+0·6	-1·0	-1·1

HARMONIC COMPONENTS OF THE DIURNAL INEQUALITY OF MAGNETIC FORCE

Values of c_n, α_n in the series $\Sigma c_n \sin(15nt + \alpha_n)$, t being mean local time, reckoned in hours from midnight

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	North component								West component								Vertical component							
	c_1	α_1	c_2	α_2	c_3	α_3	c_4	α_4	c_1	α_1	c_2	α_2	c_3	α_3	c_4	α_4	c_1	α_1	c_2	α_2	c_3	α_3	c_4	α_4
	γ	°	γ	°	γ	°	γ	°	γ	°	γ	°	γ	°	γ	°	γ	°	γ	°	γ	°	γ	°
ALL DAYS																								
Jan.	4·8	45	4·5	273	3·1	157	0·9	55	10·9	258	5·1	357	0·2	240	2·2	49	7·7	170	1·2	210	0·5	245	1·2	241
Feb.	3·9	68	4·7	267	2·6	142	0·5	69	12·4	243	4·8	35	1·0	273	3·1	20	10·8	175	4·8	269	0·4	81	1·2	189
Mar.	11·0	118	7·5	271	3·3	163	1·1	173	13·1	325	7·1	25	5·1	183	3·0	24	18·5	198	8·4	248	3·0	84	1·3	153
Apr.	17·3	110	12·8	270	4·8	130	0·9	178	18·4	221	10·5	23	6·3	196	1·3	19	16·3	191	10·6	258	2·0	103	2·5	170
May	16·2	119	10·4	281	1·9	63	0·2	155	20·3	207	9·4	21	1·9	233	1·4	65	9·8	143	7·1	267	0·8	101	0·4	256
June	16·7	123	10·0	291	1·7	89	0·9	109	24·4	199	9·1	35	2·0	226	1·4	95	10·5	157	7·2	258	0·9	89	0·4	143
July	19·1	125	9·7	281	0·1	247	0·9	40	20·0	205	7·7	14	3·7	222	1·4	75	10·6	170	7·3	264	0·9	178	2·0	237
Aug.	17·5	122	7·3	274	1·9	165	1·0	30	18·1	217	11·6	36	3·8	232	1·5	65	9·8	179	9·1	266	1·7	84	1·0	276
Sept.	15·9	115	7·2	273	3·7	153	1·0	16	14·7	232	11·3	25	5·1	210	1·3	353	12·2	203	8·1	267	1·9	25	0·7	274
Oct.	11·1	105	8·3	265	4·3	136	0·2	4	11·3	276	10·3	26	3·9	204	3·6	40	20·4	212	9·1	288	2·9	65	0·9	13
Nov.	7·9	79	5·7	258	2·9	157	0·6	121	11·6	280	5·8	5	2·4	235	1·1	36	12·5	206	2·9	274	0·9	182	1·0	265
Dec.	5·8	61	4·3	252	3·4	144	0·5	157	10·4	275	6·4	350	1·5	261	1·4	357	9·5	193	3·3	261	1·1	272	1·2	313
Year	11·5	111	7·6	273	2·5	142	0·4	92	13·8	229	8·1	22	2·8	214	1·7	38	11·6	187	6·4	264	0·9	85	0·7	221
Winter	5·5	65	4·7	262	2·9	149	0·5	89	10·9	263	5·3	5	1·2	252	1·8	26	9·8	188	2·9	263	0·4	230	0·8	252
Equinox	13·8	112	8·9	270	4·0	144	0·2	158	13·6	238	9·8	25	5·0	197	2·2	25	16·7	201	8·7	265	2·2	71	1·1	178
Summer	17·3	123	9·3	282	1·0	105	0·6	63	20·6	206	9·3	27	2·8	228	1·4	73	9·9	162	7·7	264	0·9	103	0·8	245
QUIET DAYS																								
Year	10·2	101	7·1	271	2·8	128	0·6	343	11·3	207	7·0	26	3·3	238	1·5	46	4·2	119	3·5	267	1·1	100	0·7	256
Winter	2·1	93	4·1	260	2·6	141	0·7	334	5·9	244	3·3	17	1·9	268	1·2	43	2·4	164	0·7	290	0·5	183	0·6	242
Equinox	13·8	95	8·9	268	4·6	123	1·3	337	12·9	207	9·4	21	4·9	221	2·5	46	4·5	119	4·3	255	2·1	86	1·2	255
Summer	14·9	108	8·5	297	1·2	120	0·3	106	16·9	195	8·7	35	3·5	244	0·9	47	6·6	105	5·7	273	1·2	97	0·4	281
DISTURBED DAYS																								
Year	15·5	129	10·1	294	2·6	161	1·9	141	19·5	251	9·3	8	4·3	171	2·7	28	31·9	199	11·7	268	2·3	28	1·3	159
Winter	9·0	77	7·4	277	3·6	175	1·4	109	19·4	284	6·9	358	1·3	231	3·3	358	28·0	198	7·3	265	1·5	15	0·6	291
Equinox	19·9	143	10·9	302	4·9	172	4·7	163	19·4	263	9·8	6	9·6	163	3·6	21	45·2	209	15·7	272	4·6	31	4·3	133
Summer	21·9	135	12·3	298	1·9	58	0·9	69	27·6	218	11·5	16	2·8	173	2·7	81	24·3	181	12·4	265	0·7	35	1·5	236

KEW

KEW OBSERVATORY

Latitude	51°28′N.
Longitude	0°19′W.
G.M.T. of Local Mean Noon	12h. 1m.

Heights of instruments	above M.S.L.	above ground
	m.	m.
Barometer	10·4	..
Thermometer bulbs	..	3·0
Rain-gauge site	5·5	..
Beckley rain-gauge rim	..	0·53
Sunshine recorder	..	13·3
Pressure-tube anemograph	28	23

INTRODUCTION

Full details of the site, instruments, procedure and tabulation are given in the *Observatories' Year Book* for 1938. Changes and additions only are mentioned here.

METEOROLOGY

NOTES ON THE INSTRUMENTS

Pressure.—The photographic barograph is mounted in the galvanometer room of the underground Seismograph House. It was transferred there on May 15, 1939 from the position in the north room of the basement of the Main Observatory Building which it had occupied since the inception of the record in 1862.

Rainfall.—The Jardi rate of rainfall recorder has proved to be unreliable at rates below 6 mm. per hour and such values are omitted from Table 169.

Solar radiation.—The tabulations of the radiation received on a surface perpendicular to the solar beam (Tables 173 and 175) were made on the assumption that the thermopile of the Gorczynski pyrheliograph had maintained its sensitivity. Subsequent investigation indicated that a progressive decrease in sensitivity had occurred and that all tabulations from 1938 onwards needed correction. The tabulated values for 1942 should be multiplied by the factor 1·18*.

IDENTIFICATION NUMBERS OF INSTRUMENTS IN USE IN 1942

During 1942 thermometer No. 788 was used as the control dry-bulb thermometer and No. 738 as the control wet-bulb thermometer; 1846 and 1876 were used as the measuring glasses for the control rain-gauge.

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* STAGG, J.M.; Solar radiation at Kew Observatory. *Geophys. Mem., London*, **11**, No. 86, 1950.

Thermometer corrections 1942

	No. 788 N.P.L. 1933		No. 738 N.P.L. 1938		M.O. 5 N.P.L. 1913		M.O. 10 N.P.L. 1913		M.O. 18011 N.P.L. 1929	
	°F.		°F.		°A.		°A.		°F.	
Certified	2	+0·1	2	+0·2	260	+0·1	260	+0·3	2	0·0
	12	+0·1	12	+0·1	273	0·0	273	+0·1	22	0·0
	32	0·0	32	0·0	280	0·0	280	+0·2	32	0·0
	52	−0·1	52	−0·1	290	0·0	290	+0·1	52	0·0
	72	0·0	72	−0·1	300	0·0	300	0·0	72	0·0
	92	0·0	92	−0·2	310	0·0	316	+0·1	..	..
Applied		0·0		0·0		0·0		+0·1		0·0

NOTES ON THE METEOROLOGICAL SUMMARIES

The mean temperature for the year 282·9°A. (49·8°F.) agrees well with the average of 282·8°A. (49·6°F.) for the period 1871–1915 although 1942, as in the case of the two previous years, was again remarkable for the severity of its winter months. January with a mean temperature of 274·2°A. (34·1°F.) and February with 273·5°A. (32·9°F.) were 5·0°F. and 7·3°F. respectively below the average for the period 1871–1915. The lowest reading of the grass minimum was 256·7°A. (2·7°F.) on January 21 whilst the lowest temperature in the north-wall screen 265·2°A. (18·0°F.) was recorded between 9h. and 10h. on January 15. Ice floes were again seen on the River Thames at Richmond and there were 8 "ice days", i.e. days with a maximum temperature in the screen of 273·0°A. (32·0°F.) or less, 3 in January, 4 in February and 1 in March. The maximum temperature in the north-wall screen was 303·6°A. (87·1°F.) registered about 14h. on August 28. There were 10 days, 7 in June and 3 in August, on which the maximum temperature exceeded 300·0°A. (80·6°F.)

The rainfall for the year, 573 mm., was 5% below the average (606 mm.) for the standard period 1881–1915. February (22 mm.), April (21 mm.) and September (27 mm.) were the driest months whilst May (76 mm.) and October (87 mm.) were the wettest. The heaviest fall in one day during 1942 was 31 mm. in a thunderstorm on June 30.

The sunshine for the year, 1428 hours, was 41 hours less than the average for the period 1906–1935. The sunniest months were April (212 hours), May (224 hours) and June (244 hours).

The highest wind speed recorded in a gust was 25 m./sec. (57 m.p.h.) on May 28 and December 5. The highest on record is 33 m./sec. (73 m.p.h.) on November 28, 1938.

Diurnal variation of pressure and temperature; harmonic analysis.– Notes on the tables will be found in the *Observatories' Year Book, 1938*.

TABLE A - DIURNAL VARIATION OF BAROMETRIC PRESSURE FOURIER COEFFICIENTS
KEW OBSERVATORY, LONGITUDE 0°19'W.

Values of c_n, α_n in the series $\Sigma c_n \sin(15nt + \alpha_n)$, t being local mean time reckoned in hours from midnight

	c_1		α_1		c_2		α_2		c_3		α_3		c_4		α_4	
	1942	1871-1926	1942	1871-1926	1942	1871-1926	1942	1871-1926	1942	1871-1926	1942	1871-1926	1942	1871-1926	1942	1871-1926
	mb.	mb.	°	°	mb.	mb.	°	°	mb.	mb.	°	°	mb.	mb.	°	°
January	0.30	0.02	307	315	0.22	0.31	165	151	0.20	0.17	341	346	0.07	0.07	208	202
February	0.26	0.05	91	73	0.35	0.36	139	146	0.15	0.12	345	340	0.02	0.03	145	108
March	0.38	0.11	10	38	0.39	0.40	140	149	0.10	0.07	334	332	0.07	0.04	335	25
April	0.42	0.28	345	31	0.38	0.40	155	151	0.03	0.03	158	185	0.06	0.04	328	353
May	0.50	0.32	360	27	0.42	0.35	142	148	0.08	0.09	153	161	0.04	0.02	344	319
June	0.54	0.30	360	17	0.30	0.32	141	143	0.09	0.09	161	160	0.02	0.01	335	260
July	0.15	0.26	90	16	0.32	0.31	140	140	0.08	0.10	150	153	0.02	0.01	354	281
August	0.30	0.21	2	20	0.33	0.34	145	144	0.05	0.06	113	155	0.04	0.04	307	309
September	0.28	0.12	70	6	0.46	0.40	155	152	0.03	0.01	356	350	0.05	0.04	338	332
October	0.32	0.06	11	76	0.47	0.38	151	160	0.04	0.09	360	359	0.05	0.01	284	22
November	0.16	0.03	302	124	0.35	0.34	159	160	0.14	0.13	355	358	0.02	0.03	176	183
December	0.25	0.08	205	137	0.29	0.31	145	152	0.14	0.15	355	353	0.07	0.07	162	205
Arithmetic mean	0.32	0.15	–	–	0.36	0.35	–	–	0.09	0.09	–	–	0.04	0.03	–	–
Year	0.22	0.14	5	29	0.35	0.35	148	150	0.04	0.03	358	359	0.02	0.01	302	280
Winter	0.06	0.03	280	111	0.30	0.33	151	152	0.16	0.14	348	350	0.04	0.05	180	208
Equinox	0.31	0.14	13	32	0.42	0.39	150	153	0.03	0.04	345	345	0.05	0.03	323	359
Summer	0.34	0.27	7	20	0.34	0.33	142	144	0.07	0.08	148	157	0.03	0.02	334	305

TABLE B - DIURNAL VARIATION OF TEMPERATURE FOURIER COEFFICIENTS
KEW OBSERVATORY, LONGITUDE 0°19'W.

Values of c_n, α_n in the series $\Sigma c_n \sin(15nt + \alpha_n)$, t being local mean time reckoned in hours from midnight

	c_1		α_1		c_2		α_2		c_3		α_3		c_4		α_4	
	1942	1871-1926	1942	1871-1926	1942	1871-1926	1942	1871-1926	1942	1871-1926	1942	1871-1926	1942	1871-1926	1942	1871-1926
	°A.	°A.	°	°	°A.	°A.	°	°	°A.	°A.	°	°	°A.	°A.	°	°
January	0.75	0.99	214	221	0.32	0.43	35	35	0.12	0.17	208	208	0.01	0.01	338	3
February	0.88	1.53	232	221	0.43	0.57	8	34	0.05	0.12	263	211	0.06	0.06	315	169
March	2.41	2.45	217	222	0.63	0.63	31	40	0.02	0.07	189	334	0.04	0.11	191	197
April	3.00	3.21	225	226	0.45	0.48	52	51	0.25	0.22	18	24	0.11	0.07	210	218
May	3.39	3.72	226	227	0.28	0.15	29	74	0.27	0.31	31	35	0.01	0.04	183	20
June	4.31	3.72	221	226	0.10	0.02	220	84	0.33	0.26	34	35	0.09	0.10	24	33
July	2.90	3.68	223	225	0.16	0.06	355	50	0.19	0.29	24	31	0.06	0.07	358	28
August	2.95	3.54	227	226	0.42	0.34	59	52	0.29	0.30	20	28	0.04	0.03	105	218
September	2.69	3.22	226	228	0.55	0.71	34	49	0.14	0.14	26	24	0.10	0.16	214	213
October	2.08	2.32	224	229	0.54	0.76	35	50	0.07	0.10	260	248	0.10	0.12	201	200
November	1.34	1.39	221	226	0.55	0.57	43	44	0.17	0.18	209	232	0.01	0.02	173	141
December	0.66	0.90	220	226	0.31	0.40	42	41	0.21	0.16	216	215	0.04	0.04	58	38
Arithmetic mean	2.28	2.56	–	–	0.39	0.43	–	–	0.18	0.19	–	–	0.06	0.07	–	–
Year	2.28	2.56	223	226	0.37	0.42	35	45	0.07	0.08	17	17	0.01	0.02	221	195
Winter	0.90	1.20	222	223	0.39	0.49	32	39	0.13	0.15	216	217	0.02	0.01	351	121
Equinox	2.54	2.80	223	226	0.54	0.64	37	47	0.08	0.09	12	4	0.09	0.11	207	207
Summer	3.39	3.67	224	226	0.17	0.14	38	59	0.27	0.29	28	32	0.03	0.04	30	27

"Winter" comprises the four months January, February, November, December; "Equinox" the months March, April, September, October; and "Summer" May to August.

ATMOSPHERIC ELECTRICITY

No change took place during 1942 in the method and procedures for observing potential gradient, air–earth current and conductivity from those printed in the Introduction for 1938. Details of the change of position of the Kelvin Electrograph in April 1940 and of the effects on the instrument of the erection of a fire escape in March 1941 are printed in the Introductions for the years in question.

KEW OBSERVATORY

In 1942 the mean value of the current for the year, allowing equal weight for each month, was 113 × 10^{-18} amp. cm.$^{-2}$. The mean value of the conductivity for the year was 41 × 10^{-18} ohm^{-1} cm.$^{-1}$.

The mean factor for the year for the Kelvin electrograph was 4·20, giving an equivalent height for the collector of 23·8 cm. In 1942 there were 169, 146 and 50 days of electrical character 0, 1 and 2 respectively. The extreme hourly values of potential gradient in Table 183 are 1,070 v./m. at 9h. on November 11 and -940 v./m. at 15h. on May 26.

During the following months there were not 10 "quiet days" and other spells of 24 hr. were used.

1942	Calendar days	Other spells	Total
November	5	1	6
December	7	1	8

The *Observatories' Year Book, 1938* should be consulted for an explanation of the figures in the foregoing paragraphs.

ATMOSPHERIC POLLUTION

During 1942 the highest estimate of pollution was 2·3 mg./m.^{3}, this value occurring on December 25 from 9h. to 10h. There were 25 days on which the pollution reached 1·0 mg./m^3. The number of hours credited with 1·0 mg./m^3. was 112, 55 of which were recorded during November.

SEISMOLOGY

The Seismological Diary and Table of Microseisms, which have been printed in the *Observatories' Year Book* from 1922 to 1939, are now omitted. The distribution of the Kew Monthly Bulletin ceased in May 1940* but such seismological data as are available for 1942 are published in the International Seismological Summary.

No change took place in instruments or procedure except that the two modified Wood–Anderson seismographs were put out of commission as an economy measure in May 1942.

The Galitzin seismographs were not standardised during 1942.

The total number of shocks recorded during the year was 349. The phases of 93 of these were sufficiently well defined to allow an estimate of the epicentral distance to be computed. No British earthquakes were recorded during the year.

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* It was resumed in 1947

Maximum, minimum and daily mean values in millibars for each day 0h. to 24h., G.M.T.
The initial 9 or 10 of the values is omitted, i.e. 1005·6 is printed 05·6

161 KEW OBSERVATORY: h_b(height of barometer cistern above M.S.L.) = 10·4 m. 1942

	JANUARY			FEBRUARY			MARCH			APRIL			MAY			JUNE		
	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean
									millibars									
1	*33·0*	32·0	*32·4*	20·5	12·3	15·1	16·4	10·1	12·9	09·1	04·4	07·3	22·4	17·9	20·3	29·0	23·6	26·8
2	32·5	29·9	31·2	22·8	09·6	16·0	18·5	16·0	17·5	17·8	08·6	15·6	19·8	15·3	17·2	*31·2*	28·5	*30·0*
3	29·9	15·2	23·9	22·1	06·5	12·7	18·2	08·4	13·9	16·7	05·5	10·7	24·5	19·1	20·5	*31·2*	28·2	29·9
4	15·2	03·8	07·0	18·3	06·8	12·3	08·4	98·2	01·9	07·0	94·0	03·6	*27·9*	24·5	*26·5*	29·4	26·6	28·2
5	19·9	07·3	14·3	21·9	18·3	20·3	10·7	03·7	07·8	02·5	*92·2*	96·0	27·8	24·3	26·1	27·6	23·8	25·8
6	26·1	19·9	23·6	21·6	18·3	20·1	11·4	05·7	09·2	03·3	95·6	00·4	24·5	17·8	21·2	23·8	14·1	18·1
7	26·5	21·7	24·6	27·3	18·0	21·5	16·6	04·2	09·7	01·1	93·1	*95·1*	17·8	12·3	15·2	20·7	15·2	18·9
8	22·6	15·1	20·5	28·6	24·2	26·7	17·9	15·0	16·4	09·8	01·1	05·8	16·7	14·9	15·9	20·8	18·8	19·9
9	15·1	08·3	10·9	24·2	20·2	21·4	15·1	10·6	12·8	09·7	97·5	02·9	15·3	12·1	13·5	19·4	15·9	17·6
10	25·4	13·1	21·2	20·3	09·1	13·7	15·8	11·6	14·1	24·0	01·1	14·5	12·6	02·8	07·9	17·5	15·0	15·7
11	25·1	23·3	24·3	19·0	13·0	17·3	15·7	12·0	13·6	25·6	21·4	23·8	02·8	00·1	01·5	17·8	10·9	15·0
12	24·3	05·6	16·5	18·4	08·7	12·2	14·0	07·4	11·2	21·6	12·1	16·7	02·4	98·2	00·1	10·9	05·0	*06·6*
13	05·6	97·2	99·6	23·3	08·6	15·1	07·4	98·9	01·9	14·6	10·6	11·7	10·0	99·0	03·7	09·8	*04·7*	06·9
14	16·8	99·6	08·3	32·5	23·3	28·1	01·6	99·2	00·4	26·6	14·6	20·3	16·6	10·0	13·6	09·9	06·5	08·4
15	19·8	11·4	16·5	35·6	32·2	33·8	11·4	01·6	06·9	*30·5*	26·6	*29·3*	16·6	11·5	14·6	13·0	07·6	10·2
16	12·6	07·0	09·0	*39·9*	35·6	*38·4*	11·8	04·7	09·8	30·1	21·8	25·9	14·3	10·5	11·5	13·9	11·8	12·8
17	21·5	12·6	18·6	39·4	32·7	35·3	04·7	98·6	01·3	21·8	09·2	15·1	15·1	12·7	14·4	12·3	10·1	11·3
18	21·2	16·9	19·1	36·6	34·1	35·0	01·4	*97·1*	*98·6*	09·2	03·3	05·2	14·6	06·8	09·9	18·5	12·2	14·7
19	21·7	14·5	19·7	36·5	32·1	34·5	14·0	01·4	06·8	07·9	06·0	06·9	21·6	14·6	20·1	24·6	18·5	22·4
20	21·9	14·1	18·3	32·2	20·1	26·6	18·3	14·0	17·0	11·9	07·5	09·0	20·9	09·7	14·8	25·0	21·9	23·6
21	24·9	21·7	22·7	20·1	08·1	12·8	23·4	18·0	20·0	15·2	11·7	13·6	13·0	09·5	06·6	22·9	18·9	20·9
22	27·5	24·8	26·2	08·1	04·5	05·8	29·9	23·2	26·5	15·8	13·9	14·7	14·1	12·8	13·6	20·0	15·4	17·7
23	25·3	99·8	13·9	04·7	01·5	*02·7*	*30·8*	28·8	*29·8*	20·3	14·3	15·9	13·9	01·8	09·4	15·8	12·2	14·2
24	04·1	*88·5*	98·2	05·0	*01·0*	02·8	29·6	23·4	26·7	21·1	17·3	19·3	13·7	02·2	10·4	21·5	15·0	17·9
25	00·2	89·7	*95·5*	12·2	05·0	08·2	23·4	18·0	20·5	17·8	13·2	14·8	12·9	03·3	07·0	25·8	21·5	24·2
26	21·1	99·0	09·0	15·3	11·9	13·7	19·4	14·3	17·4	13·5	11·7	12·4	04·1	*89·5*	98·7	25·9	21·1	23·5
27	20·9	99·8	11·1	15·2	12·3	12·9	14·3	08·7	10·7	12·8	10·5	11·8	99·7	96·0	*97·7*	22·1	20·2	21·1
28	03·4	97·9	00·6	12·4	09·5	10·7	16·8	12·3	15·3	15·0	12·0	13·6	07·2	95·2	01·7	20·9	18·4	19·2
29	15·4	94·1	01·6				15·7	11·7	13·3	21·8	14·9	18·4	09·2	06·5	07·8	22·3	19·9	21·2
30	16·5	90·4	07·2				14·5	12·2	13·5	24·8	21·8	23·4	12·9	09·2	11·2	20·5	15·7	18·1
31	21·0	91·3	10·5				12·2	03·7	06·7				23·6	11·6	16·0			
Mean	19·90	08·56	14·71	22·64	15·63	18·80	15·46	09·44	12·38	15·96	08·92	12·45	15·11	08·76	11·89	20·80	16·57	18·69

	JULY			AUGUST			SEPTEMBER			OCTOBER			NOVEMBER			DECEMBER		
	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean
									millibars									
1	18·9	16·4	17·5	17·5	09·1	12·5	09·9	06·6	08·4	23·5	12·9	17·4	08·5	03·9	05·4	11·9	06·2	08·0
2	18·9	15·2	16·8	09·1	*05·6*	*06·9*	12·3	08·2	11·0	*26·5*	23·5	*25·3*	12·2	08·5	10·4	19·1	09·5	15·2
3	16·8	13·9	15·8	13·3	06·0	08·0	12·7	03·2	07·5	25·4	19·3	23·3	17·0	08·2	12·3	20·3	18·0	18·9
4	13·9	09·4	10·7	20·9	13·3	16·8	20·0	12·6	17·7	19·3	12·6	15·1	16·9	10·5	14·8	20·2	09·2	16·7
5	09·4	05·1	*07·1*	23·5	20·9	22·5	18·9	11·8	14·2	18·6	11·9	14·0	10·5	*95·2*	*02·1*	09·2	95·5	00·5
6	10·6	05·2	07·7	*24·3*	22·2	*23·3*	24·7	14·4	19·7	24·1	18·6	22·3	08·3	95·3	04·3	17·2	05·3	14·1
7	12·7	10·1	11·1	22·6	18·9	20·7	26·1	24·0	25·0	21·5	10·1	15·7	13·0	04·9	07·5	18·6	15·7	16·9
8	17·9	12·7	15·9	18·9	07·9	12·9	25·3	22·8	24·1	16·2	08·6	11·5	27·4	13·0	21·2	22·4	16·0	20·4
9	17·7	12·7	15·7	14·6	08·6	11·9	29·6	22·9	25·7	20·2	10·4	16·8	29·1	26·3	27·8	21·7	13·8	17·8
10	12·7	05·4	08·1	14·4	06·6	10·1	*30·8*	25·8	*28·6*	11·2	06·2	08·2	26·3	23·4	24·9	13·8	01·0	08·2
11	14·9	07·5	11·6	09·9	07·1	08·1	25·8	19·3	22·0	24·5	11·2	19·3	27·5	22·4	25·4	03·1	96·1	99·5
12	19·9	14·9	17·3	12·3	09·5	10·5	23·4	19·8	21·1	24·3	19·6	21·5	24·2	18·9	20·9	14·1	03·1	10·3
13	20·2	17·4	19·1	14·6	11·9	13·2	23·8	22·0	22·9	23·0	19·3	21·5	34·9	24·2	30·3	11·0	05·4	06·9
14	18·7	16·3	16·9	16·7	14·1	15·1	22·5	18·6	20·2	23·2	19·1	21·1	36·3	33·2	34·7	06·4	97·5	02·9
15	22·0	18·7	20·7	17·4	15·9	16·6	24·1	17·5	20·3	24·5	16·0	21·2	33·6	28·4	30·4	02·2	95·4	98·6
16	19·7	11·3	13·8	21·4	16·9	19·2	24·2	21·5	22·9	25·2	23·4	24·3	32·5	29·0	30·9	01·9	96·1	98·4
17	11·6	08·7	09·9	22·0	18·1	20·1	21·5	17·7	19·2	24·7	17·3	21·0	33·1	31·3	32·1	96·4	*92·8*	*94·3*
18	17·5	10·7	13·2	18·1	07·8	13·6	19·0	15·7	17·6	19·4	15·9	17·4	31·3	26·2	27·7	02·2	96·4	98·7
19	17·9	15·9	16·9	08·7	*05·6*	07·3	15·7	10·0	13·5	19·3	17·9	18·8	29·0	27·5	28·0	09·6	01·9	04·2
20	19·5	16·6	18·5	16·6	08·5	12·6	10·0	00·4	03·9	18·5	09·0	14·0	27·6	25·7	26·6	18·6	09·6	16·0
21	20·9	19·0	19·7	17·1	11·2	14·7	02·9	93·9	97·6	20·8	13·0	18·4	32·2	25·2	27·5	19·8	14·7	17·4
22	19·1	06·7	14·0	11·4	09·2	10·6	01·2	96·3	99·2	17·7	14·0	15·1	34·5	31·9	33·4	31·3	10·4	18·5
23	15·5	04·7	09·6	15·2	11·1	13·4	99·7	*92·9*	*95·4*	14·3	08·7	12·1	33·5	31·4	32·2	*35·5*	30·9	*33·3*
24	15·5	11·8	13·6	15·1	11·2	13·6	99·3	93·6	96·1	08·7	02·9	04·6	*37·3*	33·5	*36·0*	31·0	26·7	28·6
25	13·3	11·4	12·4	11·2	08·9	09·6	04·1	98·8	01·1	05·7	88·7	98·2	36·2	34·3	34·9	28·2	26·5	27·3
26	13·7	10·1	12·8	17·6	09·8	13·2	08·8	04·1	06·5	94·7	*81·3*	*89·8*	34·7	27·9	31·7	28·9	27·3	27·9
27	17·8	*00·3*	07·7	18·5	15·8	17·1	10·4	05·7	08·7	00·5	94·0	96·8	27·9	21·1	24·0	28·8	26·8	27·8
28	21·3	17·8	19·5	15·8	10·2	12·4	05·7	93·8	97·8	02·8	00·3	01·5	20·7	18·2	20·0	26·8	10·8	20·0
29	21·2	15·7	17·1	11·5	05·9	09·2	05·1	93·5	97·0	03·1	96·7	99·7	18·2	13·6	14·9	16·2	08·7	10·9
30	*23·4*	21·2	*22·3*	10·2	07·3	08·6	13·2	05·0	09·5	99·2	96·9	98·2	17·9	11·9	15·7	21·2	14·0	18·7
31	22·6	17·5	20·2	10·5	07·2	09·0				04·9	98·5	02·1				14·0	06·1	10·1
Mean	17·28	12·27	14·62	15·84	11·04	13·33	15·69	09·75	12·48	16·31	09·61	13·10	25·74	20·17	22·93	16·83	09·27	13·12
									Annual	18·08	11·61	14·83						

PRESSURE AT STATION LEVEL

Monthly and annual means of hourly values in millibars at exact hours, G.M.T.

162 KEW OBSERVATORY: h_b = 10·4 m. 1942

	Hour G.M.T. 0	1	2	3	4	5	6	7	8	9	10	11	Noon	13	14	15	16	17	18	19	20	21	22	23	24	Mean
	millibars																									
Jan.	14·67	14·59	14·76	14·83	14·79	14·72	14·69	14·86	15·10	15·33	*15·54*	15·39	15·04	14·66	14·43	14·38	14·41	14·53	14·45	14·52	14·63	14·34	14·31	14·31	*14·30*	14·71
Feb.	19·44	*19·36*	19·19	18·97	18·73	18·63	*18·50*	18·58	18·81	19·01	19·02	19·11	18·83	18·52	18·24	18·22	18·23	18·39	18·65	18·85	18·93	19·03	19·08	19·11	19·08	18·80
Mar.	12·44	12·73	12·60	12·42	12·29	12·29	12·35	12·56	12·77	*12·98*	12·92	12·80	12·63	12·26	11·97	11·78	*11·55*	11·57	11·88	12·13	12·33	12·53	12·58	12·60	12·58	12·38
Apr.	12·25	12·17	12·11	12·12	12·11	12·27	12·60	12·83	12·97	13·10	*13·12*	12·87	12·60	12·54	12·28	12·04	11·86	*11·85*	11·99	12·18	12·54	12·72	12·75	12·76	12·84	12·45
May	12·31	12·17	12·12	12·04	11·98	12·09	12·34	12·54	*12·65*	12·61	12·59	12·42	12·25	12·01	11·71	11·37	11·16	*11·09*	11·20	11·39	11·79	12·18	12·21	12·35	12·35	11·89
June	19·01	18·98	18·91	18·83	18·85	19·03	19·19	19·30	*19·33*	19·29	19·18	19·04	18·85	18·63	18·39	18·15	17·92	*17·79*	17·82	17·97	18·20	18·58	18·71	18·72	18·79	18·69
July	15·00	14·80	14·62	14·37	14·33	14·36	14·49	14·62	14·69	14·73	14·71	14·68	14·65	14·56	14·44	14·39	14·25	*14·24*	14·35	14·56	14·77	15·03	15·09	*15·12*	15·03	14·62
Aug.	13·72	13·65	13·51	13·37	13·32	13·38	13·54	13·69	13·87	*13·90*	13·79	13·64	13·47	13·25	13·02	12·89	12·77	12·68	*12·66*	12·81	13·16	13·30	13·35	13·42	13·39	13·33
Sept.	12·82	12·69	12·51	12·24	12·15	12·16	12·34	12·46	12·68	12·83	12·75	12·60	12·38	12·16	12·03	11·82	*11·81*	11·95	12·21	12·62	12·91	13·05	*13·15*	13·09	13·01	12·48
Oct.	13·47	13·38	13·25	13·08	13·09	13·05	13·07	13·46	13·67	*13·78*	13·71	13·59	13·22	12·88	12·60	12·44	12·32	*12·28*	12·48	12·77	13·04	13·25	13·30	13·28	13·20	13·10
Nov.	22·83	22·69	22·68	22·57	*22·53*	22·62	22·67	22·88	23·27	23·48	*23·54*	23·49	23·16	22·97	22·65	22·54	22·64	22·75	22·90	23·04	23·08	23·19	23·10	23·07	23·06	22·93
Dec.	12·23	13·00	12·93	12·80	12·58	*12·57*	12·67	12·82	12·98	13·30	13·62	*13·65*	13·41	13·18	12·97	13·01	13·10	13·24	13·34	13·33	13·33	13·33	13·36	13·27	13·19	13·12
Annual	15·12	14·97	14·86	14·75	14·68	14·71	14·82	15·00	15·18	15·31	*15·33*	15·22	14·99	14·75	14·51	14·37	*14·29*	14·31	14·44	14·63	14·84	14·99	15·03	15·04	15·02	14·83

The initial 9 or 10 of the value is omitted, i.e. 1001·42 is printed 01·42.

PRESSURE REDUCED TO MEAN SEA LEVEL

Monthly and annual means of hourly values in millibars at exact hours, G.M.T.

163 KEW OBSERVATORY: h_b = 10·4 m. 1942

	Hour G.M.T. 0	1	2	3	4	5	6	7	8	9	10	11	Noon	13	14	15	16	17	18	19	20	21	22	23	24	Mean
	millibars																									
Jan.	15·99	15·91	16·08	16·15	16·11	16·04	16·01	16·18	16·42	16·65	*16·86*	16·71	16·36	15·97	15·74	15·69	15·72	15·84	15·77	15·83	15·94	15·65	15·63	15·63	*15·61*	16·03
Feb.	20·77	*20·69*	20·51	20·30	20·06	19·96	*19·83*	19·91	20·14	20·34	20·35	20·43	20·14	19·84	19·55	19·54	19·55	19·70	19·97	20·17	20·25	20·36	20·41	20·44	20·41	20·13
Mar.	13·74	14·03	13·91	13·78	13·59	13·59	13·66	13·87	14·07	*14·27*	14·21	14·09	13·91	13·54	13·25	13·06	*12·83*	12·85	13·17	13·42	13·62	13·82	13·88	13·90	13·88	13·68
Apr.	13·53	13·45	13·39	13·40	13·39	13·56	13·89	14·12	14·25	14·38	*14·39*	14·14	13·86	13·81	13·54	13·30	13·12	*13·11*	13·25	13·45	13·81	14·00	14·03	14·04	14·12	13·73
May	13·59	13·45	13·39	13·32	13·26	13·37	13·61	13·81	*13·92*	13·87	13·85	13·68	13·50	13·26	12·96	12·61	12·41	*12·34*	12·45	12·65	13·05	13·44	13·48	13·61	13·52	13·16
June	20·28	20·25	20·18	20·11	20·12	20·31	20·45	20·56	*20·59*	20·54	20·43	20·29	20·09	19·87	19·62	19·39	19·15	*19·02*	19·05	19·21	19·45	19·83	19·97	19·98	20·05	19·94
July	16·26	16·06	15·87	15·63	15·59	15·59	15·74	15·87	15·94	15·97	15·96	15·92	15·88	15·79	15·68	15·63	15·48	*15·47*	15·58	15·80	16·01	16·27	16·34	*16·37*	16·28	15·87
Aug.	14·97	14·91	14·76	14·62	14·57	14·63	14·78	14·94	15·12	*15·14*	15·03	14·88	14·70	14·48	14·24	14·12	14·00	13·91	*13·89*	14·04	14·40	14·54	14·59	14·66	14·64	14·57
Sept.	14·08	13·95	13·77	13·50	13·41	13·42	13·60	13·72	13·93	14·08	14·00	13·85	13·62	13·40	13·27	13·06	*13·05*	13·19	13·45	13·87	14·16	14·30	*14·40*	14·35	14·27	13·73
Oct.	14·74	14·65	14·52	14·35	14·36	14·32	14·34	14·73	14·95	*15·05*	14·97	14·86	14·47	14·14	13·86	13·69	13·58	*13·53*	13·74	14·04	14·30	14·51	14·57	14·55	14·47	14·36
Nov.	24·13	24·00	23·99	23·88	23·84	23·93	23·98	24·19	24·58	24·79	*24·85*	24·79	24·45	24·27	23·95	*23·83*	23·94	24·04	24·20	24·34	24·38	24·50	24·40	24·38	24·37	24·24
Dec.	13·52	14·29	14·22	14·09	13·87	*13·86*	13·96	14·11	14·27	14·59	14·91	*14·93*	14·69	14·46	14·25	14·29	14·39	14·52	14·62	14·62	14·61	14·62	14·64	14·55	14·47	14·41
Annual	16·40	16·25	16·14	16·03	15·97	16·00	16·10	16·28	16·46	16·59	*16·60*	16·49	16·26	16·02	15·77	15·63	*15·55*	15·57	15·71	15·90	16·11	16·27	16·31	16·32	16·30	16·10

The initial 9 or 10 of the value is omitted, i.e. 1001·42 is printed 01·42.

The monthly and annual values of pressure reduced to mean sea level are computed from the corresponding monthly and annual means of pressure at station level and of temperature. See General Introduction to the Meteorological Tables, 1938.

TEMPERATURE

Monthly and annual means of readings in degrees Absolute at exact hours, G.M.T.

164 KEW OBSERVATORY: North-wall screen: h_t = 3·0 m. 1942

	Hour G.M.T. 0	1	2	3	4	5	6	7	8	9	10	11	Noon	13	14	15	16	17	18	19	20	21	22	23	24	Mean
	degrees Absolute																									
Jan.	73·96	73·81	73·77	73·79	73·60	73·54	73·56	*73·47*	73·50	73·62	73·97	74·49	**74·81**	75·10	*75·26*	75·27	75·00	74·64	74·45	74·34	74·22	74·12	73·98	73·97	73·83	74·17
Feb.	72·13	72·82	72·80	72·73	72·75	72·74	*72·71*	72·73	72·80	73·01	73·41	73·85	74·25	74·59	74·90	*74·92*	74·77	74·45	74·09	73·84	73·61	73·40	73·21	73·07	72·93	73·51
Mar.	77·12	76·85	76·64	76·46	76·22	76·12	*76·08*	76·27	76·70	77·49	78·30	79·23	80·12	80·85	81·24	*81·26*	81·13	80·73	80·08	79·23	78·72	78·38	77·95	77·58	77·37	78·37
Apr.	81·04	80·76	80·47	80·21	80·07	79·84	*79·83*	80·61	**81·64**	82·74	83·68	84·51	85·10	85·45	85·83	85·78	*85·85*	85·52	84·73	83·75	82·86	82·30	**81·78**	81·30	80·90	82·73
May	82·66	82·32	82·05	81·81	81·67	*81·59*	82·13	82·89	83·91	84·90	85·92	86·58	87·41	87·82	88·25	*88·47*	88·38	88·21	87·41	86·41	85·27	84·41	83·71	83·15	82·79	84·89
June	86·28	85·57	85·23	84·70	*84·45*	84·71	85·68	86·76	87·99	89·08	90·17	91·03	91·63	92·48	92·83	93·32	*93·38*	**93·27**	**92·86**	91·87	90·46	89·22	88·09	87·23	86·56	89·10
July	87·43	87·33	86·99	86·74	*86·70*	86·73	87·17	87·85	88·55	89·36	90·21	90·73	91·25	91·88	92·33	*92·52*	92·38	92·23	91·85	91·19	90·12	89·21	88·55	87·99	87·51	89·48
Aug.	88·52	88·21	87·97	87·65	87·32	*87·19*	87·56	88·33	89·21	90·37	91·31	92·12	92·66	93·01	*93·36*	93·18	93·11	92·85	92·37	91·47	90·31	89·66	89·25	88·92	88·61	90·25
Sept.	86·10	85·96	85·71	85·59	85·53	85·32	*85·28*	85·75	86·56	87·49	88·42	89·13	89·75	90·42	90·59	*90·80*	90·63	90·08	89·36	88·35	87·61	87·06	86·59	86·32	85·95	87·68
Oct.	83·40	83·27	83·12	83·05	82·90	82·91	82·89	*82·83*	83·24	84·15	84·94	85·64	86·29	86·85	86·95	*87·02*	86·83	86·31	85·56	85·01	84·52	84·18	83·82	83·45	83·18	84·54
Nov.	78·25	78·15	77·94	77·85	77·75	77·71	77·64	*77·58*	77·74	78·16	78·79	79·55	80·14	80·52	*80·77*	80·70	80·24	79·68	79·28	79·00	78·92	78·56	78·49	78·46	78·19	78·83
Dec.	79·81	79·67	79·50	79·64	79·62	79·60	79·57	*79·44*	79·47	79·48	79·90	80·37	80·84	81·14	*81·18*	80·98	80·62	80·36	80·26	80·15	80·08	80·02	79·99	79·86	79·79	80·07
Annual	81·45	81·28	81·07	80·90	80·77	*80·72*	80·89	81·29	81·83	82·55	83·31	84·00	84·58	85·07	85·35	*85·41*	85·25	84·92	84·47	83·78	83·12	82·60	82·17	81·83	81·52	82·86

The initial 2 or 3 of the readings is omitted, i.e. 275·00 degrees Absolute is printed 75·00.

Add 0·16° to obtain temperature in degrees Kelvin where $T(°K.) = t(°C.) + 273·16$.

TEMPERATURE

Maximum, minimum and daily mean values in degrees Absolute for each day 0h. to 24h., G.M.T.
The initial 2 or 3 of the values is omitted, i.e. 275·0° is printed 75·0°. Add 0·16° to obtain temperature in degrees Kelvin where $T(°K.) = t(°C.) + 273·16$.

165 KEW OBSERVATORY: North-wall screen: h_t(height of thermometer bulb above ground) = 3·0 m. 1942

	JANUARY			FEBRUARY			MARCH			APRIL			MAY			JUNE		
	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean
	degrees Absolute																	
1	78·4	76·0	77·3	74·4	71·3	73·1	75·3	73·3	74·4	84·5	80·0	82·2	85·6	77·0	*81·0*	92·2	*79·6*	86·3
2	80·0	78·0	79·0	74·2	71·3	73·1	79·4	73·5	75·8	84·7	77·9	81·1	87·0	77·2	81·8	96·3	84·4	89·5
3	80·6	78·9	79·7	78·7	70·6	74·7	84·2	72·8	78·2	84·6	76·6	80·5	92·4	*76·6*	84·1	00·3	84·0	92·6
4	*83·3*	77·5	*81·2*	78·7	72·5	74·8	79·6	75·5	77·9	83·8	77·5	80·5	91·4	77·5	83·1	01·3	85·4	94·1
5	78·1	73·9	75·9	73·6	72·4	73·0	75·5	72·1	73·5	85·3	80·2	82·4	93·2	78·2	86·0	01·5	86·1	94·5
6	76·1	72·1	73·6	73·2	72·1	72·7	73·0	69·2	*71·5*	85·2	80·1	82·5	94·6	80·7	87·1	*02·9*	87·2	*95·4*
7	76·2	70·7	73·5	72·4	69·7	71·3	74·8	70·4	72·5	85·1	81·2	82·8	*94·9*	81·0	86·8	92·0	85·1	88·8
8	77·7	74·2	75·8	72·3	69·4	70·7	80·3	*69·1*	74·9	83·6	79·0	80·7	85·9	77·7	81·7	90·1	83·0	86·4
9	77·2	74·9	76·4	77·3	70·7	74·4	84·2	72·6	77·7	83·5	78·7	81·8	87·9	77·5	82·5	87·8	81·8	85·2
10	76·2	70·8	74·2	79·8	74·1	*76·7*	80·2	74·5	76·9	87·2	79·1	83·5	88·4	77·4	82·6	88·3	81·6	85·1
11	73·9	67·8	70·6	75·6	71·4	73·4	78·4	72·0	75·8	88·0	*76·3*	82·8	89·7	81·7	85·1	89·6	*79·6*	84·6
12	74·8	68·0	71·7	*80·3*	71·4	76·1	77·5	74·5	75·6	*91·6*	80·2	*85·5*	84·9	80·5	82·3	84·7	82·4	*83·6*
13	75·4	72·9	74·5	79·7	73·3	76·5	80·5	73·7	77·0	88·4	81·3	84·7	86·9	80·6	82·5	88·6	82·5	85·3
14	73·2	70·2	72·1	77·8	71·6	74·6	*89·2*	77·8	82·8	87·3	80·6	83·6	88·0	81·5	84·3	89·7	81·0	85·0
15	74·4	*65·2*	70·1	77·6	74·1	75·7	86·3	79·5	82·7	87·5	79·4	82·9	91·0	79·8	85·3	87·1	80·2	84·4
16	74·8	73·3	74·1	74·5	72·1	73·1	84·9	80·8	82·9	86·7	77·6	82·3	91·5	84·2	87·1	90·0	82·3	85·9
17	74·0	70·6	72·0	75·0	72·3	73·6	86·1	82·0	*83·3*	87·4	78·4	83·1	90·6	81·1	86·7	92·8	82·6	87·9
18	74·3	69·6	72·4	73·0	71·6	72·2	85·2	81·4	82·6	89·5	79·0	83·9	92·1	85·2	*88·1*	90·3	84·4	87·4
19	73·9	69·6	72·5	74·6	70·7	72·3	85·8	79·4	82·4	89·2	78·2	83·7	92·0	83·5	87·5	91·6	83·9	87·3
20	70·9	68·1	69·9	74·1	71·7	72·9	83·1	78·4	80·5	88·8	80·6	84·7	92·2	82·0	86·8	96·7	82·6	89·4
21	71·2	66·0	68·7	73·5	*68·4*	71·3	81·2	75·5	79·7	86·2	81·3	83·0	88·4	83·3	85·3	99·1	83·8	91·7
22	70·0	66·8	*68·3*	72·6	*68·4*	*70·4*	77·5	74·9	76·0	87·8	81·4	83·9	90·3	81·8	85·6	00·2	86·2	93·9
23	78·6	69·3	74·1	73·7	69·9	72·0	83·4	73·7	78·4	87·9	78·7	83·5	88·3	82·8	85·6	00·5	86·5	93·6
24	80·2	77·0	78·8	75·2	72·2	73·6	84·5	74·2	78·3	85·0	77·0	*80·3*	88·4	82·0	84·5	95·5	87·2	90·8
25	80·1	76·2	77·9	76·1	71·6	73·8	88·2	71·2	79·7	86·0	77·8	81·3	87·5	82·2	84·3	90·6	83·9	88·0
26	77·6	68·0	72·9	74·1	71·4	73·3	83·2	76·7	79·4	87·1	78·1	82·5	86·6	80·5	83·7	95·5	80·5	89·0
27	77·6	67·4	72·1	76·7	70·9	73·7	82·8	75·6	78·9	88·3	80·3	84·6	88·2	82·9	85·6	94·0	84·2	89·7
28	79·0	73·7	76·1	80·2	71·1	75·4	81·2	75·7	77·7	85·8	81·5	83·4	89·1	84·6	86·6	96·6	86·4	91·0
29	77·6	72·3	75·0				85·1	74·3	79·4	84·4	79·0	81·8	88·5	83·8	85·8	01·5	85·0	93·2
30	77·2	71·8	74·5				84·7	75·0	80·1	86·6	77·9	82·3	89·8	82·1	85·9	98·6	89·8	93·5
31	76·0	72·3	74·4				84·3	81·9	83·0				90·3	82·5	86·3			
Mean	76·4	71·7	74·2	75·7	71·4	73·5	81·9	75·2	78·4	86·6	79·2	82·7	89·5	80·9	84·9	94·2	83·8	89·1

	JULY			AUGUST			SEPTEMBER			OCTOBER			NOVEMBER			DECEMBER		
	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean
	degrees Absolute																	
1	95·6	86·3	90·9	99·1	84·2	91·4	94·6	89·2	*91·1*	91·8	82·1	86·8	80·4	76·7	78·5	82·7	77·7	80·0
2	96·3	86·2	91·2	93·2	85·3	89·3	93·2	86·3	89·7	91·1	78·7	84·5	81·6	75·0	78·4	77·7	71·8	75·2
3	93·0	87·2	90·1	93·9	85·9	88·6	93·2	86·3	90·5	91·1	79·2	84·4	82·8	75·6	79·6	77·3	72·2	75·4
4	93·4	88·8	90·4	89·0	84·5	*86·4*	92·0	85·5	88·7	*92·0*	80·5	86·8	79·6	74·8	77·1	80·6	76·1	78·3
5	95·1	88·8	91·5	91·1	*81·9*	86·9	92·3	86·5	89·3	91·1	85·7	88·3	82·3	78·9	80·9	82·1	77·6	80·4
6	93·1	87·0	89·6	92·8	85·1	88·4	91·6	83·5	87·5	86·3	84·2	85·4	83·6	80·3	81·7	82·8	78·9	81·0
7	93·3	87·1	90·0	91·0	84·5	88·7	91·5	81·1	87·1	89·8	86·0	88·1	*85·6*	79·5	*83·0*	84·4	82·5	83·2
8	93·2	85·2	88·6	91·1	88·4	89·1	93·2	86·0	89·3	88·3	81·4	85·7	84·3	75·0	79·6	84·6	82·8	*83·8*
9	95·1	86·9	89·6	93·9	86·6	89·7	94·6	85·9	89·2	86·8	80·4	84·2	83·2	73·6	77·1	83·8	81·7	82·4
10	88·1	85·2	86·9	90·6	86·0	88·8	94·8	83·9	89·0	89·4	83·8	86·5	83·9	74·3	79·0	84·5	82·9	83·6
11	91·2	83·1	87·2	93·8	86·7	89·5	*97·0*	81·2	89·2	86·2	80·7	83·3	77·6	75·1	76·5	84·6	81·8	83·3
12	92·6	82·7	88·1	92·1	85·9	89·0	95·5	84·9	89·7	86·3	76·5	82·6	78·9	76·7	77·8	82·8	79·9	81·7
13	93·3	83·6	89·1	91·5	86·7	89·1	91·2	87·5	89·1	87·4	80·2	84·0	81·8	76·4	79·3	84·5	82·0	83·4
14	93·7	86·6	90·4	94·2	86·3	90·4	92·6	87·9	89·7	89·1	80·5	85·7	79·2	74·1	76·6	84·6	82·2	83·2
15	93·7	84·1	89·1	93·4	88·0	90·8	91·5	84·2	88·4	88·3	83·0	86·1	81·5	75·7	79·4	83·9	81·3	82·6
16	95·1	86·8	90·4	96·3	87·3	91·6	91·2	82·5	86·7	88·3	81·9	85·0	80·9	76·5	79·1	83·5	81·4	82·6
17	87·6	85·2	86·4	95·5	84·5	89·5	92·1	84·6	88·3	88·6	83·2	85·8	80·2	75·2	77·5	84·2	80·2	83·1
18	87·4	84·6	*85·8*	98·4	83·1	90·9	91·2	86·5	88·7	89·3	85·7	87·6	82·2	74·2	78·8	82·4	79·2	81·2
19	94·0	84·1	88·3	94·6	89·2	91·9	93·7	85·3	88·9	91·2	83·2	86·7	81·2	79·6	80·6	82·3	79·0	80·9
20	93·1	87·9	90·3	93·5	86·4	89·2	92·2	88·3	89·9	87·0	82·4	84·5	82·9	79·3	81·0	82·5	77·1	80·3
21	*97·6*	90·0	*93·0*	91·6	85·4	89·1	89·5	85·3	87·5	86·5	80·7	83·5	81·3	74·2	78·9	*84·9*	82·1	83·8
22	92·4	89·0	90·5	92·2	86·8	89·3	87·9	85·5	86·5	89·0	84·2	87·3	78·4	71·9	*74·8*	*84·9*	78·1	82·8
23	93·2	87·9	90·2	92·2	85·6	88·6	90·1	84·1	86·2	90·2	85·5	*88·5*	79·7	*71·2*	75·3	82·4	74·0	78·7
24	94·4	87·1	90·0	93·8	85·0	89·0	88·4	80·9	85·0	86·5	80·5	84·2	80·3	75·8	78·3	82·2	72·9	79·0
25	94·6	86·5	90·7	94·1	86·7	91·2	86·6	*79·6*	*82·8*	85·2	76·9	81·3	82·1	79·4	80·9	77·3	*71·1*	74·6
26	91·9	83·6	88·4	96·6	89·2	92·3	87·4	79·7	83·9	81·3	78·3	80·1	81·3	78·0	79·6	76·4	73·9	75·1
27	90·3	83·4	87·8	02·1	89·2	95·2	90·1	81·6	85·2	84·8	*75·1*	79·7	81·6	78·7	80·1	77·2	74·0	75·7
28	93·7	*81·9*	88·0	*03·6*	90·7	*96·3*	85·9	80·2	83·5	83·1	75·2	*79·3*	80·0	75·6	78·6	80·6	76·0	78·4
29	96·0	86·3	89·9	01·7	89·8	94·8	88·6	81·7	84·5	81·8	76·7	80·0	81·6	74·9	78·8	79·9	73·5	76·4
30	96·2	82·6	90·2	95·3	89·7	92·1	88·1	82·2	85·1	86·2	81·1	83·2	79·7	77·0	78·2	76·4	73·2	*74·4*
31	96·0	86·5	91·1	94·3	86·9	90·7				82·9	79·3	81·5				80·0	74·0	77·6
Mean	93·4	85·9	89·5	94·4	86·5	90·3	91·4	84·3	87·7	87·6	81·1	84·5	81·3	76·1	78·8	81·9	77·8	80·1
									Annual	86·2	79·5	82·9						

MEAN RELATIVE HUMIDITY AND VAPOUR PRESSURE FOR EACH DAY

Mean percentages from readings at exact hours 0h. to 24h., G.M.T.; vapour pressure from daily mean temperature and relative humidity

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	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER	
	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.
	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.
1	88·3	7·3	92·4	5·7	75·6	5·1	65·1	7·6	65·3	7·0	69·0	10·5	72·3	14·8	71·1	14·3	84·0	17·4	82·5	13·0	89·5	8·1	83·9	8·4
2	84·9	7·9	85·3	5·2	83·2	6·2	55·9	6·0	61·3	6·9	72·2	13·6	75·8	15·8	84·7	15·7	78·8	15·0	84·5	11·5	84·7	7·6	78·9	5·7
3	89·3	8·8	92·5	6·4	77·8	6·9	70·0	7·3	53·0	7·0	69·2	15·8	80·4	15·7	81·3	14·4	87·9	*17·6*	89·8	12·1	87·5	8·5	84·5	6·1
4	88·9	*9·7*	77·5	5·4	87·9	7·6	84·5	8·8	63·3	7·8	58·5	14·6	77·6	15·4	66·4	*10·2*	76·4	13·6	94·8	15·0	97·0	7·9	78·6	7·0
5	79·1	6·0	76·5	4·7	83·3	5·3	76·5	9·0	56·5	8·5	53·0	13·6	73·6	15·7	*65·1*	10·3	78·8	14·6	90·8	15·8	93·4	10·0	80·3	8·3
6	79·7	5·1	79·9	4·8	86·0	*4·7*	80·3	9·5	*45·2*	7·3	59·8	16·2	71·0	13·4	68·4	12·0	71·2	11·8	69·0	9·9	82·5	9·3	84·8	9·1
7	89·7	5·7	77·7	4·2	82·5	4·9	76·9	9·3	51·9	8·2	*47·2*	8·5	69·1	13·4	88·4	15·8	73·8	11·9	95·6	*16·4*	86·2	*10·6*	83·2	10·4
8	85·7	6·4	73·0	3·8	81·3	5·7	77·2	8·1	57·4	*6·5*	53·6	8·2	70·5	12·5	*89·3*	16·3	75·4	14·0	78·3	11·5	84·0	8·2	91·5	11·8
9	75·5	5·9	*93·5*	6·3	76·3	6·5	*87·9*	*10·0*	55·8	6·6	57·8	8·2	71·8	13·6	82·9	15·8	76·5	14·1	74·7	9·9	92·3	7·6	85·1	10·0
10	*62·9*	4·2	88·0	*7·0*	76·6	6·2	58·2	7·4	75·8	9·1	61·1	8·6	*87·8*	13·9	86·8	15·6	73·8	13·4	73·1	11·3	88·9	8·3	84·5	10·8
11	84·3	4·3	69·7	4·4	93·2	7·0	79·1	9·6	82·5	11·6	59·1	*8·1*	67·7	*11·0*	74·0	13·9	79·5	14·6	*71·3*	8·9	*98·6*	7·7	85·4	10·7
12	89·5	5·0	83·8	6·4	81·5	6·0	61·1	8·9	80·6	9·4	*86·6*	11·1	67·0	11·5	59·5	12·6	82·0	15·6	81·1	9·7	94·0	8·1	86·5	9·7
13	88·5	6·0	*59·0*	4·6	77·7	6·3	61·2	8·4	85·6	10·2	71·9	10·3	74·3	13·6	72·0	13·2	76·1	13·9	81·8	10·7	88·1	8·4	89·2	11·3
14	81·5	4·7	63·9	4·4	86·3	10·5	60·8	7·8	75·8	10·1	66·6	9·3	67·5	13·4	79·8	15·9	83·5	15·9	88·4	13·0	94·9	7·5	89·9	11·2
15	91·6	4·5	72·3	5·4	87·7	10·6	43·5	5·3	73·1	10·5	70·3	9·5	61·2	11·2	84·4	17·2	*67·7*	11·8	72·1	10·9	94·3	9·1	86·8	10·4
16	84·0	5·6	66·5	4·1	92·3	11·3	*41·5*	*4·9*	75·8	12·2	61·8	9·2	74·0	14·7	76·7	16·4	69·4	10·9	77·5	10·9	76·3	7·2	87·7	10·5
17	78·4	4·5	72·3	4·6	90·5	11·3	62·4	7·7	73·8	11·6	62·1	10·5	83·9	12·9	70·2	13·2	82·1	14·3	86·0	12·7	74·6	6·3	88·8	11·0
18	89·0	5·2	76·9	4·4	90·3	10·8	68·6	8·9	80·7	*13·8*	76·5	12·6	84·7	12·5	76·3	15·6	81·1	14·5	86·2	14·3	81·4	7·5	*94·9*	10·3
19	92·2	5·4	72·6	4·2	88·4	10·4	71·5	9·2	71·3	11·8	72·9	11·9	64·4	11·2	79·1	17·3	77·5	14·0	91·1	14·3	83·7	8·7	87·5	9·3
20	74·8	3·6	75·0	4·5	91·6	9·5	68·0	9·3	74·7	11·8	72·1	13·5	79·5	15·7	76·3	14·1	83·0	16·0	92·4	12·5	83·4	8·9	86·1	8·8
21	81·0	3·6	74·7	4·0	87·5	8·6	80·4	9·9	83·0	11·9	69·9	15·1	70·2	*16·4*	82·2	15·0	90·1	14·9	76·3	9·7	80·9	7·5	*94·9*	*12·3*
22	74·5	*3·2*	66·2	*3·3*	88·9	6·7	71·9	9·4	*85·7*	12·5	59·3	14·7	76·4	15·3	80·1	14·9	81·3	12·6	88·5	14·4	80·3	*5·6*	86·4	10·5
23	*92·3*	6·1	71·5	4·1	74·4	6·7	70·7	9·0	84·2	12·3	60·7	14·7	66·9	13·1	79·8	14·1	73·5	11·2	86·6	15·3	88·5	6·4	91·6	8·4
24	89·3	8·2	67·7	4·3	76·3	6·8	56·5	5·8	75·6	10·3	60·1	12·3	77·4	15·0	78·4	14·3	77·9	10·9	77·2	10·3	94·2	8·4	90·4	8·5
25	66·9	5·8	65·8	4·3	77·5	7·6	63·5	7·0	80·8	10·8	61·9	10·6	*60·7*	12·3	88·1	18·4	84·3	10·2	83·5	9·1	86·4	9·2	93·7	6·4
26	64·9	3·9	77·8	4·9	69·6	6·7	60·8	7·2	81·2	10·4	57·7	10·5	68·5	12·0	88·7	19·9	74·4	*9·7*	90·1	9·1	86·3	8·4	87·9	6·2
27	77·2	4·4	75·1	4·8	71·0	6·6	54·8	7·5	79·0	11·5	61·8	11·8	82·4	13·9	74·7	*20·0*	80·4	11·4	92·0	9·0	86·3	8·7	92·8	6·9
28	83·5	6·4	79·6	5·8	*58·4*	5·0	44·3	5·6	68·2	10·6	64·2	13·3	74·8	12·8	69·3	19·8	*95·6*	12·1	*96·1*	9·2	*73·7*	6·7	92·7	8·3
29	84·5	6·0			72·7	7·0	45·3	5·1	71·5	10·6	62·9	14·9	74·5	14·3	74·7	19·5	88·5	12·0	93·3	9·3	79·5	7·3	*66·6*	5·2
30	90·1	6·1			85·0	8·6	48·8	5·7	70·0	10·4	73·6	*17·8*	65·6	12·9	83·8	18·5	90·3	12·7	92·6	11·5	80·9	7·2	67·7	*4·6*
31	77·5	5·2			*93·5*	*11·5*			66·3	10·1			62·7	13·0	88·2	17·9			79·3	*8·8*			80·0	6·8
Mean*	82·6	5·6	75·9	4·9	82·1	7·6	64·9	7·8	71·1	10·0	64·5	12·0	72·7	13·5	78·4	15·6	79·8	13·4	84·4	11·6	86·4	8·0	85·9	8·9

* Mean of the column

RELATIVE HUMIDITY

Monthly and annual means of values at exact hours, G.M.T.

167 KEW OBSERVATORY: h_t = 3·0 m. 1942

	Hour G.M.T. 0	1	2	3	4	5	6	7	8	9	10	11	Noon	13	14	15	16	17	18	19	20	21	22	23	24	Mean*
	per cent.																									
Jan.	85·2	85·8	86·3	*86·8*	86·7	85·9	85·8	85·2	85·0	85·0	82·6	79·4	77·9	77·0	76·9	*76·1*	77·0	79·3	80·7	82·4	82·5	83·2	84·0	85·2	85·0	82·6
Feb.	79·5	79·3	79·6	80·6	*81·3*	81·2	80·3	81·1	79·7	77·6	75·3	73·8	72·4	70·1	69·2	*68·0*	68·2	69·5	71·7	73·2	75·3	78·1	78·8	79·1	79·1	75·9
Mar.	86·0	87·5	88·4	89·3	90·0	*90·7*	90·5	90·3	89·1	86·6	82·8	78·4	74·6	72·0	70·7	70·5	*70·4*	72·3	75·5	79·7	81·6	82·6	84·4	86·2	86·6	82·1
Apr.	73·5	74·7	75·8	77·2	77·6	77·9	*78·3*	75·9	71·8	66·8	61·7	57·5	54·6	52·8	51·1	51·2	*50·0*	50·5	53·9	58·4	62·3	65·4	67·9	70·9	72·9	64·9
May	81·8	83·0	83·3	84·2	84·3	*85·0*	83·2	80·0	74·7	69·8	64·2	62·3	57·2	56·7	55·9	*55·6*	56·8	58·0	60·6	65·9	71·1	74·7	78·1	80·9	81·7	71·1
June	76·3	79·0	80·2	81·9	*83·4*	82·0	78·1	72·0	65·9	61·9	57·5	53·6	52·6	50·4	50·0	48·0	*47·9*	48·9	50·8	54·8	60·2	65·2	71·3	74·9	76·5	64·5
July	81·8	83·8	85·5	86·2	86·2	*86·5*	84·3	81·1	76·9	72·9	68·0	66·2	64·2	61·2	59·1	*58·6*	58·9	59·6	61·9	64·1	68·7	73·5	76·5	79·7	81·8	72·7
Aug.	87·3	88·5	89·0	89·2	90·6	*91·2*	90·5	87·3	82·9	77·0	71·2	67·3	65·0	64·1	*63·9*	65·0	66·0	67·8	69·3	73·8	79·7	83·5	85·2	86·5	87·6	78·4
Sept.	87·5	88·0	88·9	89·4	*89·6*	*89·6*	89·5	87·7	85·3	81·1	75·0	71·1	68·2	66·8	66·6	*65·7*	66·5	69·6	73·4	78·6	81·9	84·1	85·5	86·2	87·6	79·8
Oct.	89·5	89·8	90·1	*90·7*	90·6	90·0	90·3	90·3	88·9	86·3	83·4	80·3	77·1	73·0	72·4	*72·3*	74·3	77·6	82·1	84·7	87·0	87·9	88·2	89·0	89·2	84·4
Nov.	89·2	89·9	90·5	90·9	90·4	90·7	*91·5*	91·1	91·5	89·6	86·4	84·1	81·3	78·9	77·2	*76·1*	79·6	82·5	84·9	86·9	86·2	87·3	88·1	88·9	89·5	86·4
Dec.	87·2	88·5	89·5	89·0	88·4	88·9	89·7	*89·7*	89·5	89·1	86·6	84·3	82·0	80·0	*78·6*	79·4	81·8	83·8	85·1	86·5	85·8	85·9	86·3	86·3	86·8	85·9
Annual	84·3	84·9	85·6	86·3	86·6	*86·7*	86·0	84·4	81·8	78·7	74·7	71·5	68·9	66·9	66·0	*65·6*	66·5	68·3	70·9	74·1	76·9	79·3	81·2	82·9	83·8	77·4

VAPOUR PRESSURE

Monthly and annual means of values at exact hours, G.M.T., computed from corresponding mean values of temperature and relative humidity

168 KEW OBSERVATORY: h_t = 3·0 m. 1942

	Hour G.M.T. 0	1	2	3	4	5	6	7	8	9	10	11	Noon	13	14	15	16	17	18	19	20	21	22	23	24	Mean*
	millibars																									
Jan.	5·6	5·6	5·6	*5·6*	5·5	5·5	5·5	*5·4*	5·4	5·4	5·4	5·4	5·4	5·5	5·5	5·5	5·4	5·5	5·5	5·5	5·5	5·5	5·5	5·6	5·5	5·5
Feb.	4·6	4·8	4·8	4·8	4·9	4·9	4·8	4·9	4·8	4·7	4·7	4·8	4·8	4·8	4·9	4·8	4·7	*4·7*	4·7	4·7	4·8	*4·9*	4·9	4·9	4·8	4·8
Mar.	7·1	7·0	7·0	7·0	6·9	6·9	*6·9*	7·0	7·1	7·3	7·4	7·4	7·5	7·6	*7·7*	7·7	7·6	7·6	7·6	7·6	7·5	7·4	7·3	7·3	7·2	7·3
Apr.	7·9	7·9	7·8	7·9	7·8	7·7	7·8	7·9	8·0	*8·1*	7·9	7·8	7·7	7·6	7·6	7·6	7·4	*7·3*	7·4	7·5	7·6	7·7	7·7	7·8	7·8	7·7
May	9·8	9·7	9·6	9·5	9·5	9·5	9·6	9·7	9·7	9·7	9·6	9·7	*9·4*	9·6	9·7	9·8	9·9	10·0	10·0	10·1	*10·1*	10·0	10·0	10·0	9·9	9·8
June	11·7	11·5	11·4	11·3	11·3	11·3	11·5	11·3	11·2	11·3	11·3	*11·1*	11·3	11·4	11·6	11·4	11·5	11·6	11·8	11·9	12·0	12·0	*12·2*	12·2	11·9	11·6
July	13·5	*13·7*	13·7	13·5	13·5	13·6	13·6	13·7	13·6	13·6	13·4	13·4	13·5	13·4	*13·3*	13·3	13·4	13·3	13·5	13·4	13·4	13·5	13·5	13·6	13·5	13·5
Aug.	15·4	15·3	15·2	14·9	14·8	*14·8*	15·0	15·2	15·3	15·3	15·0	14·9	14·9	15·0	15·3	15·4	15·5	15·7	15·6	15·7	15·8	*15·9*	15·7	15·7	15·5	15·3
Sept.	13·2	13·1	13·0	13·0	13·0	12·8	*12·8*	12·9	13·3	13·4	13·1	13·0	13·0	13·3	13·4	13·4	13·4	13·6	13·7	*13·7*	13·6	13·6	13·3	13·2	13·1	13·2
Oct.	11·3	11·2	11·2	11·2	11·1	11·0	11·0	*11·0*	11·1	11·4	11·6	11·7	11·8	11·5	11·5	11·6	11·7	11·9	*11·9*	11·9	11·8	11·7	11·4	11·3	11·1	11·4
Nov.	7·9	7·9	7·9	7·9	7·8	7·8	7·8	7·7	7·8	7·9	8·0	8·2	*8·2*	8·2	8·2	8·0	8·1	8·1	8·1	8·0	7·9	8·0	8·0	7·9	8·0	
Dec.	8·6	8·7	8·7	8·7	8·6	8·7	*8·7*	8·7	8·6	8·6	8·6	8·7	8·7	8·7	8·5	8·5	8·5	8·6	8·7	8·7	8·7	8·6	8·6	8·6	*8·5*	8·6
Annual	9·3	9·3	9·2	9·2	9·2	*9·1*	9·2	9·2	9·3	9·4	9·4	9·4	9·4	9·4	9·5	9·5	9·5	9·5	*9·6*	9·6	9·5	9·5	9·4	9·4	9·3	9·4

* Mean of values, 1,2,.....23,½(0 + 24).

RAINFALL

Amount in millimetres, duration in hours and maximum rate of fall for each day 0h. to 24h., G.M.T.

169 KEW OBSERVATORY: h_r(height of receiving surface above M.S.L.) = height of station above M.S.L. + height of receiving surface above ground = 5·5 m. + 0·53 m. 1942

	JANUARY			FEBRUARY			MARCH			APRIL			MAY			JUNE		
	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate
	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.
1	···	···	···	*9·5*	*16·2*	···	···	···	···	1·2	0·4	7	···	···	···	···	···	···
2	···	···	···	5·9	5·0	···	···	···	···	···	···	···	···	···	···	···	···	···
3	1·7	3·3	8	5·9	8·7	*10*	···	···	···	4·5	3·5	14	···	···	···	···	···	···
4	5·0	3·6	9	···	···	···	*13·6*	10·9	6	2·6	4·6	···	···	···	···	···	···	···
5	···	···	···	0·3	···	···	1·0	3·2	···	0·2	0·6	···	···	···	···	···	···	···
6	···	···	···	0·1	···	···	···	···	···	3·9	1·7	*27*	···	···	···	···	···	···
7	0·4	0·6	···	···	···	···	···	···	···	0·1	0·2	···	···	···	···	···	···	···
8	···	···	···	···	···	···	···	···	···	2·2	0·9	7	···	···	···	···	···	···
9	0·4	0·9	7	0·5	1·1	7	···	···	···	*6·0*	*6·6*	10	···	···	···	···	···	···
10	···	···	···	0·1	0·3	7	···	···	···	···	···	···	*18·5*	8·4	30	···	···	···
11	···	···	···	···	···	···	7·6	*14·7*	···	···	···	···	1·1	1·9	···	···	···	···
12	0·1	···	···	···	···	···	0·4	0·9	···	···	···	···	2·0	5·1	···	4·5	*5·9*	7
13	1·8	7·9	···	0·1	0·1	···	···	···	···	···	···	···	6·2	*9·6*	···	···	···	···
14	···	···	···	···	···	···	3·4	3·0	*30*	···	···	···	···	···	···	···	···	···
15	···	···	···	···	···	···	0·1	0·1	···	···	···	···	3·0	1·7	13	···	···	···
16	···	···	···	···	···	···	4·3	3·9	7	···	···	···	4·4	3·5	16	···	···	···
17	···	···	···	···	···	···	1·2	2·4	6	···	···	···	0·2	0·4	···	···	···	···
18	1·2	2·6	···	···	···	···	1·5	2·7	7	···	···	···	2·6	2·7	···	···	···	···
19	5·7	8·5	···	···	···	···	5·5	3·7	22	···	···	···	···	···	···	···	···	···
20	3·3	6·2	···	···	···	···	···	···	···	···	···	···	···	···	···	···	···	···
21	···	···	···	···	···	···	···	···	···	···	···	···	0·3	1·4	···	···	···	···
22	0·9	2·5	···	···	···	···	···	···	···	···	···	···	11·8	1·2	*137*	···	···	···
23	*15·7*	*13·4*	9	···	···	···	···	···	···	···	···	···	6·1	7·1	12	···	···	···
24	3·6	3·9	12	···	···	···	···	···	···	···	···	···	3·6	1·9	37	···	···	···
25	···	···	···	···	···	···	···	···	···	···	···	···	5·9	4·9	13	···	···	···
26	···	···	···	···	···	···	···	···	···	···	···	···	6·7	3·3	11	···	···	···
27	2·8	3·0	11	···	···	···	···	···	···	···	···	···	2·0	1·8	11	···	···	···
28	···	···	···	···	···	···	···	···	···	···	···	···	0·1	0·2	···	···	···	···
29	1·5	2·1	6				···	···	···	···	···	···	0·6	0·6	35	···	···	···
30	11·2	8·2	*20*				···	···	···	···	···	···	1·0	0·2	21	*31·5*	1·5	*84*
31	0·2	0·5	···				3·6	5·0	18				···	···	···			
Total	55·5	67·2	-	22·4	31·4	-	42·2	50·5	-	20·7	18·5	-	76·1	55·9	-	36·0	7·4	-

	JULY			AUGUST			SEPTEMBER			OCTOBER			NOVEMBER			DECEMBER		
	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate
	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.
1	···	···	···	···	···	···	1·2	1·6	···	0·1	···	···	7·6	5·4	12	0·9	0·5	6
2	···	···	···	5·4	3·0	10	···	···	···	···	···	···	0·1	0·2	···	3·5	1·9	7
3	···	···	···	0·9	0·5	···	2·1	3·3	6	···	···	···	3·3	4·7	···	0·6	0·7	···
4	0·4	0·7	···	···	···	···	0·1	···	···	0·1	···	···	···	···	···	···	···	···
5	0·1	0·1	···	···	···	···	0·3	0·5	9	1·9	1·0	12	*21·1*	*12·6*	16	*9·1*	2·5	*57*
6	2·8	0·3	*60*	···	···	···	···	···	···	0·3	0·4	···	8·0	3·7	13	···	···	···
7	···	···	···	0·2	0·3	···	···	···	···	8·9	5·6	22	8·1	4·9	*37*	(···)	0·1	···
8	0·8	0·4	12	3·2	*4·8*	6	···	···	···	1·6	2·4	23	···	···	···	0·4	0·8	···
9	···	···	···	2·1	0·4	27	0·1	1·0	···	···	···	···	···	···	···	···	···	···
10	*14·7*	*12·0*	18	(···)	0·5	···	···	···	···	0·2	0·4	···	···	···	···	···	···	···
11	···	···	···	2·3	0·7	53	···	···	···	···	···	···	···	···	···	1·8	2·0	···
12	···	···	···	···	···	···	···	···	···	···	···	···	···	···	···	2·1	2·4	8
13	5·0	1·7	54	···	···	···	0·1	0·2	···	0·7	0·9	6	···	···	···	0·9	2·0	···
14	0·1	0·5	···	···	···	···	(···)	0·1	···	···	···	···	···	···	···	4·0	3·6	33
15	(···)	0·1	···	1·2	1·2	7	0·2	0·4	···	0·6	0·1	42	···	···	···	3·0	3·8	11
16	2·1	1·6	34	11·0	3·3	30	···	···	···	···	···	···	···	···	···	0·8	1·1	···
17	6·5	5·9	9	···	···	···	···	···	···	···	···	···	···	···	···	1·8	2·0	16
18	1·4	2·7	···	···	···	···	···	···	···	(···)	0·2	···	···	···	···	7·6	*10·1*	···
19	···	···	···	2·6	3·4	13	···	···	···	···	···	···	···	···	···	2·8	3·9	···
20	···	···	···	0·1	0·3	···	0·3	0·2	6	13·8	5·0	29	0·5	0·4	···	···	···	···
21	···	···	···	0·5	0·6	···	*10·3*	*8·4*	*27*	1·2	2·5	6	···	···	···	2·6	1·8	13
22	0·1	0·2	···	3·8	1·1	48	0·5	0·8	···	0·6	1·3	···	···	···	···	4·4	6·2	6
23	0·8	0·9	···	···	···	···	0·6	0·5	6	4·8	2·5	22	···	···	···	···	···	···
24	···	···	···	···	···	···	0·1	0·1	···	4·7	4·2	22	0·2	0·4	···	···	···	···
25	···	···	···	7·2	3·4	37	0·4	0·2	11	8·5	3·0	41	···	···	···	···	···	···
26	···	···	···	2·5	1·2	19	···	···	···	*21·5*	*9·6*	*56*	···	···	···	···	···	···
27	9·5	5·3	18	···	···	···	···	···	···	1·4	0·8	27	1·4	1·4	···	···	···	···
28	···	···	···	···	···	···	6·3	6·6	6	1·7	2·9	···	···	···	···	3·7	3·1	13
29	···	···	···	*11·8*	2·0	*66*	1·6	1·6	8	10·8	4·0	26	···	···	···	···	···	···
30	···	···	···	···	···	···	2·3	3·7	···	3·8	2·6	32	···	···	···	···	···	···
31	···	···	···	1·3	1·5	8				···	···	···				5·5	2·7	···
Total	44·3	32·4	-	56·1	28·2	-	26·5	29·2	-	87·2	49·4	-	50·3	33·7	-	55·5	51·2	-

RAINFALL

Monthly and annual totals of amounts in sixty-minute periods between exact hours, G.M.T.

170 KEW OBSERVATORY: h_r = 5·5 m. + 0·53 m. 1942

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	0-24
	millimetres																								
Jan.	0·9	2·8	2·5	1·3	0·9	1·0	0·1	0·3	0·4	1·0	1·2	1·0	1·8	1·2	1·6	3·3	5·8	*7·5*	3·0	2·9	2·9	2·8	6·0	3·3	55·5
Feb.	0·1	0·1	0·1	1·8	*3·4*	*3·4*	1·9	1·0	1·0	1·1	0·9	1·0	1·1	1·4	1·1	0·5	0·4	0·3	0·1	0·5	0·3	0·4	0·3	0·2	22·4
Mar.	1·7	0·7	0·4	3·4	2·4	2·1	1·7	1·9	2·0	2·3	3·2	*3·5*	1·5	1·5	1·2	1·2	1·7	0·8	1·0	1·4	2·5	3·3	0·6	0·2	42·2
Apr.	0·3	···	0·1	···	0·1	0·3	1·3	0·9	0·4	0·3	0·1	0·2	2·6	1·0	1·0	1·0	···	···	0·2	0·8	2·4	1·9	*3·7*	2·1	20·7
May	3·3	1·8	2·5	1·9	1·2	1·0	0·6	0·3	0·9	1·6	1·8	0·5	1·1	2·0	3·3	2·8	*14·9*	4·6	2·9	5·0	7·3	7·8	3·2	3·8	76·1
June	0·2	···	···	···	···	···	0·5	0·1	0·1	0·2	1·1	0·9	···	···	···	···	0·3	0·4	0·6	*24·4*	7·2	···	···	···	36·0
July	0·8	2·3	2·9	3·8	4·6	1·1	0·5	2·1	2·8	1·3	0·5	*6·1*	1·3	1·1	0·9	0·8	2·1	1·5	0·7	0·9	0·5	0·4	4·5	0·8	44·3
Aug.	···	···	0·8	3·7	3·2	3·2	2·8	1·3	3·0	1·2	0·7	0·4	1·2	0·1	2·7	2·3	1·4	4·1	5·1	5·1	*9·5*	3·3	0·8	0·2	56·1
Sept.	···	0·6	0·3	0·4	1·0	0·2	···	0·8	1·6	1·3	0·9	0·6	0·6	*4·2*	0·9	3·3	3·3	2·0	1·1	0·6	0·6	0·8	0·8	0·6	26·5
Oct.	2·0	1·5	1·3	1·8	0·6	1·7	0·9	1·4	1·0	4·3	6·2	2·4	1·6	2·1	8·3	*11·0*	6·4	3·6	4·6	5·5	2·6	3·4	8·5	4·5	87·2
Nov.	3·0	4·3	0·9	0·8	2·2	2·7	0·5	*5·1*	2·7	1·8	1·1	1·7	2·2	1·6	0·7	1·1	2·5	0·4	1·2	1·1	4·1	4·5	3·1	1·0	50·3
Dec.	5·2	3·2	3·2	4·8	3·6	1·0	1·5	3·6	*6·6*	2·5	0·3	0·4	0·4	···	0·6	2·2	2·0	1·1	2·1	2·6	3·7	1·3	2·4	1·2	55·5
Annual	17·5	17·3	15·0	23·7	23·2	17·7	12·3	18·8	22·5	18·9	18·0	18·7	15·4	16·2	22·3	29·5	40·8	26·3	22·6	*50·8*	43·6	29·9	33·9	17·9	572·8

RAINFALL

Monthly and annual totals of durations in sixty-minute periods between exact hours, G.M.T.

171 KEW OBSERVATORY: h_r = 5·5 m. + 0·53 m. 1942

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	0-24
	hours																								
Jan.	1·6	2·3	2·0	2·2	1·4	1·3	0·4	0·8	1·0	2·0	1·6	1·1	2·0	1·7	2·7	3·1	5·0	5·4	*5·5*	5·2	3·7	5·2	5·3	4·7	67·2
Feb.	0·5	0·5	0·5	2·1	*3·0*	*3·0*	2·5	1·5	1·0	1·0	1·0	1·0	1·6	1·9	1·7	1·5	0·8	0·5	0·2	1·3	1·2	1·2	0·9	1·0	31·4
Mar.	1·9	1·5	0·6	2·0	2·5	2·7	2·2	2·2	2·1	2·2	3·0	*3·1*	3·0	2·1	2·2	2·3	1·9	1·7	1·5	1·9	2·2	3·4	1·9	0·4	50·5
Apr.	0·8	···	0·2	···	0·2	0·3	1·1	1·0	0·9	0·7	0·2	0·2	1·3	1·0	0·5	0·4	···	0·1	0·8	0·7	1·2	2·2	*2·9*	1·8	18·5
May	1·9	2·3	3·1	2·9	1·9	1·8	1·0	1·0	0·9	0·8	0·8	0·9	1·6	1·8	1·0	3·2	*4·5*	3·1	3·6	3·7	3·8	3·9	3·4	3·0	55·9
June	0·2	···	···	···	···	···	0·5	0·2	0·2	0·3	0·9	0·9	···	···	···	···	0·5	1·0	1·0	*1·1*	0·6	···	···	···	7·4
July	0·8	2·0	2·1	2·0	*2·2*	1·4	1·0	1·4	*2·2*	0·9	1·0	1·4	1·3	1·2	1·0	1·0	1·7	1·6	1·5	1·1	0·9	0·4	1·3	1·0	32·4
Aug.	···	···	0·5	1·1	0·9	0·9	1·7	1·2	1·8	0·8	0·7	0·8	0·8	0·4	1·0	1·3	1·5	2·3	1·7	2·5	*3·2*	1·7	1·0	0·4	28·2
Sept.	0·2	1·2	0·8	0·9	1·8	0·4	···	1·5	*2·7*	1·8	1·0	0·8	1·0	2·0	1·2	1·4	2·0	1·8	0·7	1·4	0·9	1·0	1·5	1·2	29·2
Oct.	1·9	1·6	0·7	2·3	1·0	1·5	0·9	1·0	1·1	1·3	2·5	1·6	1·4	1·3	2·8	*3·8*	3·5	2·2	2·2	2·7	2·1	3·9	3·0	3·1	49·4
Nov.	2·0	1·9	1·3	1·0	1·6	2·2	0·9	*2·6*	2·0	1·8	1·5	1·6	2·0	1·7	0·6	1·0	0·9	0·3	1·4	1·3	0·9	1·0	1·0	1·2	33·7
Dec.	2·7	3·6	3·0	3·1	3·5	1·2	1·9	*3·7*	3·3	2·0	0·9	0·4	0·5	···	1·1	2·4	2·3	1·6	2·4	2·4	2·8	1·9	2·9	1·6	51·2
Annual	14·5	16·9	14·8	19·6	20·0	16·7	14·1	18·1	19·2	15·6	15·1	13·8	16·5	15·1	15·8	21·4	24·6	21·6	22·5	25·3	23·5	*25·8*	25·1	19·4	455·0

NOTES ON RAINFALL

172 KEW OBSERVATORY 1942

Dry Periods

The following definitions are adopted by the British Rainfall Organization
An "absolute drought" is a period of at least 15 consecutive days to none of which is credited 0·2 mm. of rain or more
A "partial drought" is a period of at least 29 consecutive days, the mean daily rainfall of which does not exceed 0·2 mm.
A "dry spell" is a period of at least 15 consecutive days to none of which is credited 1·0 mm. of rain or more

"Absolute drought": February 10–March 3; April 10–May 9; June 13–29.
"Partial drought": February 3–March 3; April 9–May 9; May 27–June 29
"Dry spell": February 4–March 3; April 10–May 9; June 13–29; November 8–26

Wet Periods

The following definitions are adopted by the British Rainfall Organization
A "rain spell" is a period of at least 15 consecutive days to each of which is credited 0·2 mm. of rain or more
A "wet spell" is a period of at least 15 consecutive days to each of which is credited 1·0 mm. of rain or more

No "rain spells" or "wet spells" occurred in 1942

Rainfall Duration

Hours	0·1–1·0	1·1–2·0	2·1–6·0	6·1–12·0	>12·0
Number of days	54	26	54	16	4

Continuous or Heavy Falls

The fall of the longest duration occurred on March 11 when 8 mm. fell in 14 hr. 42 min. Falls of 10 hr. duration occurred on January 23 (9 mm.) and on March 4 (13 mm.)

Heavy Falls in short periods

On May 22, 5 mm. fell in 3 min. and 10 mm. in 12 min. whilst on June 30, 5 mm. fell in 5½ min., 10 mm. in 16 min., 25 mm. in 54 min. and 31 mm. in 1hr. 15 min. The last two measurements come within the category of "Noteworthy Falls" as now defined. (See British Rainfall, 1935, p. 274).

Rate of Rainfall (Jardi Recorder)

The highest instantaneous rate of rainfall recorded by this instrument was 137 mm./hr. at 16h. 05m. on May 22. The maximum rate exceeded 50 mm./hr. on May 22, June 30, July 6 and 13, August 11 and 29, October 26 and December 5.

DURATION OF BRIGHT SUNSHINE AND TOTAL SOLAR RADIATION FOR EACH DAY

Solar radiation received on a surface perpendicular to the solar beam

173 KEW OBSERVATORY: h_s(height of records above ground) = 13·3 m. 1942

	JANUARY			FEBRUARY			MARCH			APRIL			MAY			JUNE		
	Total for day	Per cent. of possible	Solar radiation	Total for day	Per cent. of possible	Solar radiation	Total for day	Per cent. of possible	Solar radiation	Total for day	Per cent. of possible	Solar radiation	Total for day	Per cent. of possible	Solar radiation	Total for day	Per cent. of possible	Solar radiation
	hr.	%	J./cm.^{2}	hr.	%	J./cm.^{2}	hr.	%	J./cm.^{2}	hr.	%	J./cm.^{2}	hr.	%	J./cm.^{2}	hr.	%	J./cm.^{2}
1	...	...	...	...	...	...	...	...	...	7·4	57	1420	9·8	66	1840	8·2	50	1720
2	...	...	...	...	...	...	0·9	8	180	10·6	82	1920	8·2	55	1230	10·9	67	2370
3	...	...	...	...	...	...	2·1	19	290	0·2	2	100	11·3	76	1710	12·5	77	2340
4	0·7	9	60	...	...	...	...	...	...	4·0	31	580	*12·4*	*83*	2370	14·1	86	2250
5	3·2	40	290	...	...	...	...	...	...	5·9	45	640	11·4	76	1700	14·0	86	2040
6	4·6	*58*	410	...	...	...	...	...	...	4·2	32	220	12·1	81	2840	14·0	86	2060
7	0·9	11	150	...	...	...	0·1	1	10	3·8	29	290	11·6	77	*2910*	11·2	68	2360
8	2·5	31	230	3·0	32	260	8·2	73	*1110*	6·5	49	910	12·1	80	1550	9·5	58	1270
9	3·3	41	310	...	...	...	2·7	24	440	0·4	3	60	10·8	71	2050	4·0	24	660
10	1·5	19	160	0·2	2	50	...	...	40	8·7	65	1100	3·2	21	280	6·7	41	870
11	0·2	2	180	1·6	17	170	...	...	...	2·0	15	280	2·7	18	500	12·5	76	2130
12	2·7	33	170	0·1	1	40	...	...	...	10·0	74	1430	...	...	...	...	...	...
13	...	...	...	6·4	65	*900*	7·2	62	680	5·4	40	650	2·8	18	230	5·4	33	550
14	...	...	...	6·9	*70*	660	3·7	32	520	11·3	83	1710	5·2	34	570	7·8	47	1000
15	...	...	30	...	...	...	3·6	31	430	12·2	89	2320	6·3	41	710	0·3	2	80
16	...	...	...	2·0	20	190	0·1	1	20	*12·6*	*91*	*2520*	9·9	64	1310	1·3	8	200
17	...	...	10	...	...	...	...	...	10	6·7	48	1050	6·4	41	970	9·1	55	1210
18	...	...	...	...	...	...	0·5	4	40	4·8	34	390	0·8	5	80	0·5	3	80
19	...	...	...	2·2	22	150	0·8	7	90	8·7	62	1050	12·1	77	1900	1·2	7	130
20	...	...	...	...	...	...	...	...	...	6·2	44	740	3·8	24	470	5·8	35	790
21	0·2	2	90	0·3	3	40	...	...	...	0·7	5	80	1·1	7	70	10·4	63	1360
22	2·4	28	240	3·7	36	310	...	...	...	3·5	25	290	3·3	21	360	*14·2*	*86*	2470
23	...	...	...	0·1	1	10	*9·7*	*79*	1090	2·6	18	250	3·8	24	370	13·5	81	*2510*
24	0·1	1	30	...	...	...	6·0	49	460	11·0	77	1980	9·7	61	1650	8·0	48	980
25	*4·8*	55	480	2·2	21	180	6·7	54	550	11·0	77	1440	1·0	6	90	5·8	35	630
26	0·1	1	...	...	...	...	4·9	39	600	8·6	60	1330	7·2	45	980	10·9	66	1680
27	1·3	15	160	4·3	40	460	1·6	13	170	11·8	81	1790	6·7	42	690	8·2	50	1380
28	3·5	40	*510*	1·9	18	310	2·7	21	340	8·9	61	1430	9·8	61	1410	6·0	36	890
29	...	...	...				6·4	51	510	10·0	68	1980	8·2	51	1230	12·8	77	2410
30	...	...	...				1·5	12	250	12·5	85	2290	10·5	65	1770	5·3	32	610
31	0·1	1	10				...	...	...				10·2	63	1250			
Mean	1·04		110	1·25		130	2·24		250	7·07		1070	7·24		1130	8·14		1300

	JULY			AUGUST			SEPTEMBER			OCTOBER			NOVEMBER			DECEMBER		
	Total for day	Per cent. of possible	Solar radiation	Total for day	Per cent. of possible	Solar radiation	Total for day	Per cent. of possible	Solar radiation	Total for day	Per cent. of possible	Solar radiation	Total for day	Per cent. of possible	Solar radiation	Total for day	Per cent. of possible	Solar radiation
	hr.	%	J./cm.^{2}	hr.	%	J./cm.^{2}	hr.	%	J./cm.^{2}	hr.	%	J./cm.^{2}	hr.	%	J./cm.^{2}	hr.	%	J./cm.^{2}
1	7·6	46	890	7·4	48	1130	3·1	23	510	7·7	66	1320	...	...	...	3·2	39	390
2	3·7	22	420	3·2	21	460	5·5	41	870	*9·1*	*79*	1230	4·8	50	640	0·8	10	120
3	2·5	15	340	3·7	24	670	1·5	11	230	5·4	47	390	2·4	25	320	...	...	...
4	2·5	15	180	0·3	2	70	7·2	54	1480	1·1	10	90	...	...	...	3·5	43	420
5	6·0	37	860	1·1	7	110	6·4	48	1330	0·1	1	30	...	...	...	3·1	39	410
6	8·5	52	1550	2·4	16	280	10·5	79	2110	...	...	...	6·4	68	840	2·3	29	290
7	11·6	71	1750	0·4	3	100	7·0	53	1330	...	...	...	2·4	26	360	...	...	...
8	4·6	28	800	...	...	...	*11·6*	*88*	*2140*	3·4	30	550	*7·2*	*78*	*1160*	0·3	4	70
9	5·5	34	1060	6·9	46	1150	2·1	16	220	1·2	11	170	3·7	40	380	3·0	38	460
10	...	...	...	0·2	1	30	10·3	79	1320	3·4	31	540	5·7	63	770	...	...	...
11	5·7	35	690	7·1	48	1160	8·5	66	810	7·7	70	1240	...	...	...	0·1	1	30
12	9·1	56	1420	7·5	51	1130	2·7	21	350	1·3	12	210	...	...	...	*5·7*	*73*	640
13	5·5	34	850	1·5	10	160	0·1	1	10	4·3	40	430	...	...	10	...	...	...
14	3·7	23	540	4·2	29	580	0·2	2	20	1·0	9	130	1·2	13	170	1·4	18	180
15	10·2	63	1670	3·9	27	520	7·6	60	1890	8·1	76	*1770*	...	...	...	0·4	5	80
16	3·1	19	450	8·0	55	1460	9·0	71	1560	4·2	39	590	0·9	10	120	...	...	...
17	...	...	...	*12·5*	*86*	*2780*	0·1	1	50	0·2	2	40	1·8	21	230	1·2	15	120
18	...	...	...	11·0	76	2260	2·6	21	280	0·3	3	20	4·3	50	460	...	...	...
19	6·1	38	1230	4·2	29	590	3·6	29	660	3·4	33	420	...	...	...	...	...	10
20	0·2	1	20	7·9	55	1390	0·3	2	40	...	...	...	2·0	23	200	1·3	17	160
21	6·4	40	760	3·1	22	660	...	...	...	6·2	60	1070	...	...	...	...	...	10
22	0·1	1	...	2·9	20	310	0·2	2	10	...	...	...	3·1	36	250	0·5	6	50
23	2·0	13	210	6·0	42	910	5·9	49	1080	0·1	1	10	0·5	4	120	4·3	55	560
24	7·2	46	1000	7·2	51	1060	5·7	47	910	6·4	63	1040	...	...	50	5·6	72	*900*
25	5·5	35	660	0·1	1	10	0·4	3	90	2·3	23	290	...	...	...	0·1	1	20
26	2·0	13	270	2·4	17	300	0·8	7	80	...	...	...	...	...	...	...	...	...
27	1·0	6	100	10·6	76	1660	4·5	38	520	3·0	30	440	...	...	...	...	...	...
28	10·7	69	1440	10·8	78	2040	...	...	...	...	...	...	1·2	15	110	...	...	...
29	4·3	28	610	5·8	42	630	0·8	7	100	...	...	...	1·3	16	120	5·5	71	540
30	11·1	72	1990	3·7	27	310	...	...	10	1·0	10	80	3·7	45	250	3·0	38	20
31	*13·0*	*84*	*2130*	0·9	7	180				1·9	20	150				5·4	69	540
Mean	5·14		770	4·74		780	3·94		670	2·67		390	1·75		220	1·64		190
							Annual Mean			3·91		590						

See Introduction for corrections to tabulated values of radiation.

Monthly and annual totals between exact hours, local apparent time

174 KEW OBSERVATORY: h_s (height of recorder above ground) = 13·3 m. 1942

	Hour L.A.T. 3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	Total	per cent. of possible
	hours																			%
Jan.	–	–	–	–	···	0·7	2·7	5·8	5·9	*7·2*	5·3	3·5	1·0	···	–	–	–	–	32·1	12
Feb.	–	–	–	···	···	2·5	3·7	3·3	3·8	*6·8*	6·6	6·4	1·6	0·2	···	–	–	–	34·9	13
Mar.	–	–	···	0·1	1·7	5·0	6·6	7·9	10·2	*11·0*	9·6	8·1	6·3	2·7	0·2	···	–	–	69·4	19
Apr.	–	···	0·7	10·1	17·4	20·1	21·0	*21·2*	19·8	19·8	20·3	17·0	17·9	15·6	10·5	0·8	···	–	212·2	51
May	···	0·5	8·0	14·3	15·7	*19·0*	18·2	18·5	18·9	17·9	16·3	17·3	16·1	15·5	16·0	10·3	1·9	···	224·4	47
June	···	2·6	13·4	17·4	*20·2*	20·0	20·1	18·8	18·4	17·7	15·8	18·8	15·0	16·1	15·6	10·5	3·7	···	244·1	49
July	···	0·8	4·8	8·6	10·5	11·1	10·0	11·7	12·6	14·0	14·5	*15·7*	13·0	10·9	10·9	8·7	1·6	···	159·4	32
Aug.	–	···	1·5	6·6	10·6	11·2	15·6	14·5	*15·8*	13·4	11·7	8·8	11·5	11·1	10·5	4·1	···	–	146·9	33
Sept.	–	–	0·3	6·5	9·9	11·2	10·4	11·9	12·2	11·8	*12·4*	12·2	9·3	6·4	3·7	···	–	–	118·2	31
Oct.	–	–	–	···	2·0	8·0	8·3	9·5	10·1	*11·1*	9·9	9·4	8·6	5·7	0·2	–	–	–	82·8	25
Nov.	–	–	–	–	···	1·0	4·4	8·7	*10·1*	*10·1*	9·0	7·4	1·9	···	–	–	–	–	52·6	20
Dec.	–	–	–	–	···	1·1	5·5	7·0	*10·3*	*10·3*	9·4	6·6	0·5	···	–	–	–	–	50·7	21
Annual	···	3·9	28·7	63·6	88·0	110·9	126·5	138·8	148·1	*151·1*	140·8	131·2	102·7	84·2	67·6	34·4	7·2	···	1427·7	32

SOLAR RADIATION RECEIVED ON A SURFACE PERPENDICULAR TO THE SOLAR BEAM

Monthly and annual totals between exact hours, local apparent time

175 KEW OBSERVATORY: h_s = 13·3 m. 1942

	Hour L.A.T. 3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	Total
	joules per square centimetre																		
Jan.	–	–	–	–	···	130	430	640	710	770	500	280	60	···	–	–	–	–	3520
Feb.	–	–	–	···	20	210	360	380	440	730	680	550	290	70	···	–	–	–	3730
Mar.	–	–	···	70	240	560	740	900	1080	1250	1120	800	620	350	100	···	–	–	7830
Apr.	–	···	190	1050	1840	2550	3040	3310	3560	3570	3610	3170	2890	2080	1150	230	···	–	32240
May	···	90	840	1530	1910	2260	2700	3350	3820	3310	3170	3330	2970	2590	2050	970	210	···	35100
June	···	480	1340	2200	2880	3460	3610	3680	3360	3380	3010	3260	2700	2230	1890	1130	420	···	39030
July	···	160	610	1020	1410	1900	1560	1980	2110	2270	2200	2510	2020	1600	1500	890	150	···	23890
Aug.	–	20	340	1020	1450	1830	2320	2350	2710	2510	2350	1670	2090	1790	1270	380	···	–	24100
Sept.	–	–	100	900	1530	1910	1830	2010	2080	2150	2250	2090	1630	920	570	40	–	–	20010
Oct.	–	–	–	10	250	1100	1360	1580	1540	1670	1430	1340	1190	710	70	–	–	–	12250
Nov.	–	–	–	–	20	180	590	1090	1270	1130	1070	860	310	40	–	–	–	–	6560
Dec.	–	–	–	–	···	130	510	880	1230	1330	1010	700	230	···	–	–	–	–	6020
Annual	···	750	3420	7800	11550	16220	19050	22150	23910	24070	22400	20560	17000	12380	8600	3640	780	···	214280

See Introduction for correction to tabulated values.

Mean speed and highest instantaneous speed recorded each day (0h. to 24h., G.M.T.) by the pressure-tube anemograph

176 KEW OBSERVATORY: h_a (height of anemograph above M.S.L.) = height of ground above M.S.L. + height of anemograph above ground = 5 m. + 23 m. 1942

	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER	
	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust
	metres per second																							
1	1·8	6	2·4	8	4·1	11	7·4	21	3·4	13	3·0	11	4·2	10	*1·1*	10	3·2	12	1·8	8	3·0	9	4·2	14
2	2·8	7	3·7	11	3·4	9	5·4	20	3·6	14	2·7	9	3·8	10	2·5	12	3·6	13	*0·7*	6	1·8	9	1·5	7
3	5·5	14	3·8	12	3·7	10	3·2	12	2·5	13	*0·9*	7	4·0	13	3·0	14	5·3	17	0·8	5	2·3	11	1·0	6
4	4·9	13	5·5	15	3·6	12	4·9	16	1·8	12	1·3	7	*5·9*	*19*	3·2	11	4·1	13	1·1	7	1·4	5	2·6	10
5	5·9	15	7·1	17	5·4	12	6·0	17	3·0	11	2·6	9	3·4	11	1·6	7	*6·7*	19	2·3	12	3·1	11	6·2	*25*
6	3·2	14	4·7	15	5·9	13	7·1	21	3·8	12	2·4	*14*	4·8	15	1·3	7	2·5	12	4·1	11	*4·6*	*15*	3·7	13
7	1·7	5	6·1	16	4·6	15	8·3	23	4·1	14	4·5	*14*	5·1	18	3·6	13	2·2	10	1·5	8	3·7	14	6·3	15
8	3·2	11	2·9	12	3·7	16	5·2	16	7·3	15	3·0	12	3·3	14	4·2	15	3·1	12	4·2	14	2·0	7	4·9	15
9	5·2	17	*1·7*	8	1·7	10	8·6	23	7·1	15	2·1	11	3·3	11	3·0	15	2·1	9	5·6	21	0·4	2	6·0	16
10	5·6	19	3·8	15	2·8	7	6·6	22	5·9	16	4·4	12	2·9	11	*5·8*	18	1·2	6	*6·3*	20	1·1	6	*6·8*	18
11	*1·3*	4	3·1	13	1·8	10	2·2	9	2·0	9	*4·7*	12	3·3	12	5·6	17	*0·8*	5	2·5	12	*0·3*	3	5·7	21
12	1·8	9	4·5	15	*6·7*	18	5·1	14	4·6	11	3·6	11	1·6	8	4·0	15	2·9	13	2·3	11	1·8	9	3·6	15
13	5·4	16	5·0	17	5·9	14	5·5	13	4·3	11	2·9	13	3·2	12	2·6	9	4·9	13	1·0	6	3·4	11	7·2	18
14	2·6	9	3·0	11	3·1	13	8·3	20	3·0	10	1·8	9	2·8	11	2·9	10	1·9	8	4·3	16	0·9	5	4·6	14
15	2·5	9	2·7	9	4·2	17	6·0	14	3·2	13	2·7	13	3·2	13	4·8	15	4·0	14	5·3	20	0·9	4	4·4	14
16	4·6	12	6·0	14	4·2	14	5·9	17	2·9	14	2·4	9	5·1	19	2·0	9	3·8	13	4·1	14	3·4	11	6·7	20
17	3·1	9	*7·3*	*18*	3·6	11	5·6	18	3·4	12	2·6	13	3·6	19	1·9	9	2·9	11	4·2	13	3·6	12	4·9	13
18	2·2	7	5·5	12	3·2	11	2·5	8	5·1	17	2·5	8	4·9	16	2·0	11	3·4	12	3·1	12	2·5	9	2·6	8
19	4·3	13	3·9	10	2·6	10	2·6	10	4·7	14	3·1	7	4·0	14	3·5	13	2·7	9	2·1	7	1·8	6	4·0	15
20	3·5	11	2·8	8	1·6	5	2·9	13	*1·6*	8	1·4	10	2·0	9	3·5	18	5·2	19	3·3	17	1·8	9	4·6	18
21	2·9	8	4·1	11	3·5	13	2·3	6	1·6	6	1·2	8	2·7	12	5·0	*18*	2·8	13	4·3	15	3·7	12	6·5	19
22	2·6	8	3·7	10	6·4	15	*1·8*	8	2·4	11	2·1	11	5·5	19	4·5	15	4·2	13	5·1	15	1·3	7	5·2	17
23	4·9	15	4·7	13	4·9	12	3·9	15	4·9	16	2·2	10	5·1	18	1·9	9	5·4	*21*	5·4	15	1·7	9	2·2	11
24	3·9	17	7·0	17	2·4	7	7·6	16	6·9	20	4·4	12	5·6	16	1·8	11	3·6	13	5·1	*22*	1·3	8	2·6	11
25	*6·5*	*20*	6·6	15	*1·3*	11	7·8	17	6·8	22	3·1	10	3·9	11	3·2	13	1·5	7	4·2	21	4·2	*15*	*0·8*	4
26	6·0	20	5·3	14	6·0	*19*	7·1	16	5·7	21	2·1	10	3·0	11	1·6	10	4·1	12	3·7	18	3·8	10	1·0	4
27	5·7	17	2·2	7	5·4	15	8·0	19	6·9	19	2·3	12	3·2	13	2·1	9	2·0	8	1·9	10	3·5	11	0·6	3
28	4·8	18	4·3	12	5·7	13	*11·0*	*25*	*9·7*	*25*	2·7	10	2·2	10	2·3	12	1·1	6	1·3	9	3·3	13	3·5	12
29	4·8	20			1·7	6	10·7	25	6·8	19	1·5	9	2·7	12	1·4	13	3·6	15	3·4	12	3·0	11	5·8	19
30	4·6	16			2·7	11	5·1	15	4·0	14	2·0	12	*1·3*	7	2·8	11	2·1	8	2·8	11	1·6	8	5·9	20
31	5·5	19			6·1	17			2·6	12			2·4	12	1·8	10			3·0	12			4·3	14

WIND

Monthly and annual means of mean wind speed between exact hours, G.M.T.

177 KEW OBSERVATORY: h_a = 5 m. + 23 m. 1942

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	metres per second																								
Jan.	3·4	3·6	3·8	4·0	3·8	4·0	4·0	3·9	3·9	3·9	4·3	4·6	4·6	4·7	*4·7*	4·6	4·5	4·2	4·0	4·0	3·5	3·4	*3·1*	3·1	4·0
Feb.	3·9	3·8	3·8	*3·6*	3·7	4·0	4·1	4·2	4·5	4·7	5·0	5·1	5·0	5·1	*5·1*	5·1	4·8	4·6	4·5	4·4	4·2	4·1	4·2	4·0	4·4
Mar.	3·4	3·4	3·4	3·3	*3·2*	3·2	3·3	3·4	3·8	4·2	4·4	4·5	4·7	*4·8*	4·6	4·6	4·5	4·2	4·1	3·9	4·0	4·1	3·7	3·7	3·9
Apr.	4·7	4·4	4·5	4·4	4·3	*4·2*	4·5	5·1	5·7	6·4	6·9	7·3	7·5	7·6	*7·7*	7·5	7·4	7·0	6·1	5·8	5·4	5·3	5·1	4·9	5·8
May	3·4	3·3	3·2	3·2	*3·1*	3·3	3·9	4·0	4·4	4·6	5·1	5·4	5·5	5·6	*5·9*	*5·9*	5·5	5·4	5·0	4·4	4·1	4·0	3·6	3·4	4·4
June	1·8	1·7	1·6	*1·5*	1·6	1·6	2·0	2·5	2·7	3·0	3·3	3·2	3·3	3·4	3·5	3·5	3·6	*3·7*	3·5	3·2	2·6	2·2	1·9	2·0	2·6
July	2·5	*2·4*	2·4	2·5	2·7	2·7	3·0	3·3	3·6	3·9	4·4	4·5	4·8	5·0	*5·1*	5·0	4·7	4·7	4·5	3·8	3·1	2·8	2·5	2·5	3·6
Aug.	1·9	1·8	1·7	1·7	*1·6*	1·6	1·9	2·2	2·8	3·2	3·8	4·0	4·2	4·3	*4·5*	4·4	4·3	3·9	3·5	3·0	2·7	2·7	2·3	2·1	2·9
Sept.	2·4	*2·3*	2·5	2·5	2·7	2·6	2·7	2·8	3·4	3·8	4·1	4·2	4·3	*4·5*	4·3	4·3	4·1	3·7	3·1	2·8	2·6	2·6	2·5	2·5	3·2
Oct.	2·9	2·9	2·8	2·7	2·6	2·6	*2·5*	2·6	3·1	3·5	3·9	3·9	4·0	*4·1*	4·1	3·8	3·5	3·3	3·4	3·5	3·1	3·1	3·1	3·0	3·3
Nov.	2·2	2·3	2·1	2·2	2·2	2·1	*2·0*	2·2	2·3	2·3	2·6	*3·0*	3·0	2·7	2·9	2·5	2·3	2·3	2·2	2·2	2·2	2·4	2·4	2·1	2·4
Dec.	4·2	4·1	4·0	4·1	4·1	4·0	3·7	3·8	*3·7*	3·7	4·3	4·4	4·7	*4·8*	4·7	4·5	4·2	4·1	4·1	4·3	4·3	4·4	4·3	4·2	4·2
Annual	3·1	3·0	3·0	3·0	*3·0*	3·0	3·1	3·3	3·7	4·0	4·3	4·5	4·6	4·7	*4·8*	4·6	4·4	4·2	4·0	3·8	3·5	3·4	3·2	3·2	3·7

DISTRIBUTION OF WIND SPEED, EXTREME VELOCITIES AS RECORDED BY PRESSURE-TUBE ANEMOGRAPH

178 KEW OBSERVATORY: h_a = 5 m. + 23 m. 1942

	DISTRIBUTION OF WIND SPEED								EXTREME VELOCITIES				
	More than 17·1 m./sec.		10·8 to 17·1 m./sec.		5·5 to 10·7 m./sec.	1·6 to 5·4 m./sec.	Less than 1·6 m./sec.	No record	Highest hourly wind			Highest gust	
	Dates of occurrence	Duration	No. of days	Duration	Duration	Duration	Duration	Duration	Veer from N.	Speed	Hour ended	Speed	Date
		hr.		hr.	hr.	hr.	hr.	hr.	°	m./sec.	day h.	m./sec.	day h. m.
Jan.	–	0	0	0	199	465	80	0	355	11	26 11	20	25 12 30
Feb.	–	0	0	0	206	434	32	0	45	9	17 20	18	17 15 00
Mar.	–	0	1	1	197	451	95	0	85	11	26 17	19	26 15 40
Apr.	–	0	7	48	319	303	50	0	60	15	28 15	25	28 14 35
May	–	0	2	10	225	392	117	0	215	13	28 4	25	28 2 20
June	–	0	0	0	26	481	213	0	5	7	7 8	14	6 23 55) 7 6 55)
July	–	0	0	0	103	547	94	0	210	11	4 14	19	4 14 00
Aug.	–	0	0	0	80	452	212	0	215	9	10 15	18	21 14 10
Sept.	–	0	0	0	102	469	149	0	225	10	5 15	21	23 13 10
Oct.	–	0	0	0	103	454	187	0	240	9	9 24	22	24 13 35
Nov.	–	0	0	0	16	456	248	0	340	7	6 5	15	6 4 50) 25 10 25)
Dec.	–	0	0	0	247	380	117	0	180	10	16 12	25	5 8 20
Year	–	0	10	59	1823	5284	1594	0	60	15	Apr. 28 15	25	May 28 2 20 Dec. 5 8 20

TEMPERATURE IN THE GROUND AT DEPTHS OF 30 CM.(1ft.) AND 122 CM.(4ft.) AT 9h., G.M.T.

179 KEW OBSERVATORY 1942

	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER	
	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.
	degrees Absolute																							
1	76·1	80·5	74·0	77·9	73·8	77·0	80·7	79·4	82·7	82·1	86·3	84·4	91·2	86·9	90·3	87·9	91·8	88·9	86·2	87·1	82·9	85·2	79·1	82·0
2	76·9	80·2	74·0	77·8	73·8	77·0	80·2	79·4	82·7	82·0	87·0	84·6	91·2	87·1	90·6	87·9	91·5	88·9	85·7	87·1	82·0	85·1	79·4	82·0
3	77·6	80·2	74·0	77·7	74·0	77·0	80·1	79·5	82·5	82·1	88·0	84·6	91·3	87·1	90·2	87·9	91·1	88·9	85·6	87·0	82·0	85·0	78·2	81·9
4	78·4	80·2	74·0	77·7	75·2	77·0	80·2	79·7	83·0	82·1	89·4	84·8	91·0	87·2	90·1	88·0	90·5	89·1	85·8	87·0	81·7	84·8	78·5	81·8
5	78·3	80·1	74·0	77·7	75·7	77·0	80·9	79·9	83·8	82·1	89·9	85·0	91·1	87·4	89·2	88·0	90·1	89·0	87·0	86·8	81·6	84·7	78·8	81·7
6	77·1	80·2	74·0	77·5	74·9	77·1	81·0	79·9	84·3	82·1	90·3	85·1	91·0	87·3	89·3	88·1	89·7	89·0	87·0	86·9	81·9	84·4	79·0	81·5
7	76·0	80·2	74·0	77·4	74·4	77·1	81·3	80·0	85·0	82·2	91·0	85·4	90·8	87·3	89·7	88·0	88·9	88·9	87·0	86·8	82·2	84·2	79·8	81·5
8	75·6	80·1	74·0	77·4	74·1	77·1	81·2	80·1	85·2	82·3	90·0	85·7	90·6	87·3	89·8	88·0	89·3	88·7	87·4	86·9	81·9	84·2	80·5	81·4
9	75·6	80·1	73·9	77·4	74·2	77·1	81·0	80·1	84·6	82·6	89·2	85·8	90·0	87·6	89·8	88·0	89·4	88·7	86·0	86·8	81·0	84·1	81·0	81·4
10	75·7	80·0	73·9	77·3	75·0	77·1	81·1	80·3	84·6	82·8	88·6	86·1	90·1	87·6	89·9	88·0	89·2	88·6	86·2	86·9	80·8	84·1	81·0	81·5
11	75·1	79·8	73·9	77·3	75·1	77·1	81·1	80·3	84·7	82·8	87·7	86·0	89·1	87·6	89·6	88·0	88·9	88·6	85·7	86·9	80·5	84·0	81·3	81·6
12	74·6	79·6	73·9	77·3	75·6	77·1	81·6	80·5	85·2	82·9	87·9	85·9	89·0	87·7	89·6	88·0	89·2	88·4	84·6	86·8	80·5	83·8	81·3	81·7
13	74·6	79·4	74·3	77·3	75·5	77·1	82·2	80·4	84·5	83·0	87·2	85·9	89·3	87·7	89·7	88·0	89·7	88·5	85·0	86·4	80·5	83·6	81·1	81·8
14	74·3	79·3	74·2	77·2	76·5	77·2	82·2	80·7	84·5	83·0	87·4	86·0	90·1	87·6	89·9	88·0	89·4	88·3	84·9	86·3	80·0	83·4	81·7	81·9
15	74·1	79·2	74·0	77·2	78·4	77·3	82·0	80·9	85·0	83·1	87·4	85·8	90·0	87·6	90·5	88·0	89·7	88·5	85·9	86·4	79·9	83·3	81·8	82·0
16	74·3	79·1	74·0	77·2	79·5	77·3	81·7	81·0	85·8	83·1	87·1	85·9	90·0	87·4	90·7	88·0	88·6	88·5	85·2	86·3	80·0	83·2	81·7	82·0
17	74·2	79·0	74·0	77·2	80·2	77·7	81·7	81·1	86·3	83·1	87·3	85·8	90·1	87·5	90·5	88·1	88·6	88·3	85·2	86·1	79·8	83·3	81·9	82·1
18	74·1	79·0	74·0	77·2	80·8	78·0	82·0	81·1	86·8	83·3	88·0	85·8	88·9	87·5	90·5	88·1	88·9	88·2	85·9	86·2	79·2	83·1	81·4	82·1
19	74·1	78·9	74·0	77·2	81·0	78·2	82·5	81·1	86·8	83·4	88·0	85·8	88·2	87·5	91·3	88·1	88·7	88·2	86·0	86·1	79·9	82·9	81·3	82·1
20	74·1	78·8	74·0	77·2	81·0	78·4	83·1	81·2	87·0	83·8	88·0	86·0	89·3	87·3	91·1	88·2	89·2	88·1	85·6	86·1	80·0	82·7	81·0	82·1
21	74·0	78·6	74·0	77·2	80·8	78·7	83·6	81·2	87·0	83·8	89·2	85·9	90·1	87·3	90·7	88·2	89·0	88·1	85·2	86·2	80·4	82·7	81·1	82·1
22	74·0	78·6	73·8	77·1	79·8	79·0	83·2	81·3	86·5	84·0	90·1	86·1	90·8	87·3	90·3	88·2	88·5	88·1	85·5	86·1	79·5	82·7	82·0	82·1
23	74·0	78·4	73·8	77·1	78·8	79·1	83·6	81·4	86·6	84·1	91·0	86·1	90·1	87·6	89·9	88·4	88·0	88·1	86·1	86·1	78·2	82·4	80·8	82·1
24	74·0	78·3	73·7	77·1	78·7	79·1	83·0	81·7	86·5	84·4	91·3	86·1	89·9	87·6	89·7	88·3	87·2	88·1	86·3	86·1	78·3	82·3	80·3	82·1
25	74·2	78·2	73·7	77·1	78·1	79·1	82·8	81·8	86·7	84·2	91·0	86·2	90·1	87·6	90·2	88·2	86·5	87·9	84·9	86·1	78·9	82·2	79·1	82·1
26	74·6	78·1	73·7	77·1	78·7	79·1	82·7	82·0	86·0	84·2	89·9	86·6	90·0	87·7	90·9	88·2	86·0	87·9	84·2	86·1	79·4	82·1	78·9	82·1
27	74·2	78·1	73·7	77·1	78·5	79·2	83·0	81·9	85·8	84·3	90·2	86·7	90·0	87·7	91·1	88·3	86·0	87·8	83·1	86·0	79·6	82·1	78·6	82·0
28	74·1	78·1	73·7	77·0	78·7	79·2	83·2	81·9	86·1	84·3	90·2	86·8	89·0	87·8	92·0	88·3	85·9	87·4	82·9	85·9	79·8	82·0	78·7	81·9
29	74·1	78·0			78·4	79·2	83·0	82·0	86·2	84·3	90·4	86·8	89·8	87·8	92·6	88·5	86·0	87·3	82·7	85·4	79·1	82·0	79·0	81·6
30	74·0	78·0			78·7	79·2	82·7	82·0	86·2	84·3	91·9	86·9	89·5	87·9	92·8	88·6	85·7	87·2	82·8	85·3	79·5	82·0	77·8	81·5
31	74·1	77·9			80·0	79·2			86·7	84·5			90·5	87·9	92·0	88·8			83·1	85·2			77·3	81·3
Mean	75·0	79·2	73·9	77·3	77·4	77·9	82·0	80·8	85·3	83·2	89·0	85·8	90·1	87·5	90·5	88·1	88·7	88·3	85·3	86·4	80·4	83·4	80·1	81·8
											Year		83·2	83·4										

MINIMUM TEMPERATURE "ON THE GRASS" DURING THE INTERVAL 18h. TO 7h., G.M.T.

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	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
	degrees Absolute											
1	74·2	66·9	71·9	78·1	70·2	*70·8*	86·3	76·7	84·4	81·4	70·3	74·8
2	75·8	72·7	70·3	74·9	68·8	80·3	82·4	79·1	84·7	72·1	70·3	74·2
3	78·0	69·5	66·4	*69·3*	*66·9*	77·4	81·7	82·4	80·8	73·2	70·9	*63·1*
4	78·7	74·7	76·6	72·5	67·4	79·2	86·4	80·2	80·5	75·6	69·5	75·3
5	71·3	70·8	73·6	78·6	69·8	79·1	86·2	*72·9*	84·4	86·9	76·2	70·0
6	68·6	71·6	71·4	76·9	74·5	78·9	82·4	79·6	77·5	83·6	79·3	75·2
7	64·1	71·2	69·1	78·2	71·3	85·6	84·4	77·5	75·0	84·7	77·6	81·8
8	69·8	69·1	*61·9*	74·7	76·4	72·3	81·1	87·0	82·7	83·9	68·8	81·6
9	71·4	64·2	67·0	75·3	75·1	73·1	82·0	80·6	82·4	76·5	68·6	79·9
10	71·8	73·2	67·2	80·2	75·2	73·2	85·2	80·8	77·2	84·3	70·1	79·7
11	60·8	68·0	66·7	69·4	82·2	74·8	80·3	84·8	74·2	77·0	69·0	81·2
12	59·7	65·7	74·1	72·6	78·9	80·8	75·2	83·1	80·2	69·2	75·3	77·3
13	70·4	73·2	71·6	76·9	79·9	81·8	76·0	85·4	86·9	80·3	72·1	78·3
14	70·8	66·2	74·8	78·2	80·9	77·2	86·4	81·4	86·4	73·5	66·5	79·6
15	57·4	72·1	73·6	74·9	72·2	71·6	78·6	84·3	85·3	83·3	71·6	80·8
16	71·2	68·8	78·9	72·1	82·3	80·7	84·7	89·1	77·3	78·6	71·0	77·0
17	69·9	71·6	80·9	73·7	74·1	75·0	83·9	77·7	81·1	79·9	71·4	80·6
18	63·8	70·9	80·3	75·8	84·2	80·1	82·7	76·9	80·9	85·6	67·8	72·2
19	72·4	70·6	80·3	70·2	80·7	84·7	81·9	86·8	81·6	81·8	79·2	78·1
20	67·4	64·0	77·9	76·3	75·0	76·3	85·3	82·5	84·7	74·3	78·0	72·4
21	*56·7*	71·3	76·2	78·7	79·1	78·3	87·9	81·4	85·2	77·7	76·9	79·9
22	62·9	65·7	74·7	76·9	75·3	79·4	86·9	85·6	83·7	81·9	*63·4*	83·7
23	65·8	*62·5*	70·7	74·4	75·8	79·3	86·8	82·1	82·5	86·5	63·8	67·2
24	75·2	70·9	69·1	76·6	77·6	84·4	84·2	78·6	79·4	83·6	70·3	71·8
25	73·7	70·2	66·4	75·2	77·7	78·6	85·5	80·4	*73·0*	69·8	75·3	66·3
26	71·7	68·6	69·0	75·2	73·7	71·2	77·6	88·8	74·5	74·9	74·1	73·1
27	61·3	71·9	73·3	77·3	79·4	75·3	84·2	85·8	78·2	*68·7*	76·2	73·0
28	72·0	63·9	74·1	78·6	82·5	78·1	74·7	85·4	74·7	70·8	75·8	75·3
29	68·3		67·8	76·9	81·3	76·7	81·1	84·2	79·8	71·4	68·1	72·1
30	66·4		68·1	74·1	77·7	84·5	*74·1*	87·2	75·2	78·8	74·3	70·2
31	73·8		80·8		79·6		79·7	83·1		78·4		70·8
Mean	68·9	69·3	72·4	75·4	76·3	78·0	82·4	82·3	80·5	78·3	72·1	75·4
						Year	76·0					

The initial 2 or 3 of the readings is omitted, i.e. 275·0 degrees is printed 75·0.

The minimum "on the grass" refers to the interval from 18h. on the previous day to 7h. on the day to which it is entered.

Add 0·16° to obtain temperature in degress Kelvin where $T(°K.) = t(°C.) + 273·16$.

ELECTRICAL OBSERVATIONS, UNDERGROUND LABORATORY, WILSON METHOD

Mean value for periods of twenty minutes about 14h. 30m.

F = Potential gradient, unit 1 v./cm. $\lambda+$ = Conductivity due to positive ions, unit 10^{-16} ohm.$^{-1}$ cm.$^{-1}$
i = Air-earth current, unit 10^{-18} amp. cm.$^{-2}$

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	JANUARY			FEBRUARY			MARCH			APRIL			MAY			JUNE		
	F	$\lambda+$	i	F	$\lambda+$	i	F	$\lambda+$	i	F	$\lambda+$	i	F	$\lambda+$	i	F	$\lambda+$	i
1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
2	3·71	38	143	...	...	...	...	...	...	2·03	67	136	...	...	...	2·03	87	177
3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
4	...	...	...	6·15	19	116	...	...	...	...	...	...	1·30	33	43	1·86	42	78
5	4·00	19	78	...	...	...	...	...	...	...	...	...	...	...	...	2·37	45	107
6	5·62	14	81	...	...	...	6·62	22	149	...	...	...	...	...	...	...	...	...
7	5·14	11	57	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
8	4·84	13	61	...	...	...	...	...	...	...	...	...	4·73	42	200	...	...	...
9	...	...	...	...	...	...	4·66	23	107	...	...	...	...	...	...	1·51	59	89
10	...	...	...	5·44	13	70	5·76	17	96	...	...	...	...	...	...	...	...	...
11	...	...	...	6·93	22	155	...	...	...	...	...	...	...	...	...	...	...	...
12	...	...	...	5·30	22	118	...	...	...	...	...	...	...	...	...	...	...	...
13	...	...	...	...	...	...	4·06	30	115	...	...	...	...	...	...	...	...	...
14	...	...	...	...	...	...	...	...	...	5·11	57	294	2·77	60	165	...	...	...
15	...	...	...	...	...	...	...	...	...	...	...	...	1·28	51	65	2·02	26	53
16	...	...	...	...	...	...	...	...	...	3·68	17	63	...	...	...	1·20	59	71
17	...	...	...	4·13	60	247	...	...	...	4·30	18	77	...	...	...	...	...	...
18	...	...	...	5·59	25	140	...	...	...	...	...	...	...	...	...	1·67	56	94
19	...	...	...	...	...	...	...	...	...	...	...	...	1·45	76	111	...	...	...
20	...	...	...	...	...	...	...	...	...	1·16	32	38	...	...	...	...	...	...
21	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
22	5·21	25	131	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
23	...	...	...	...	...	...	5·13	31	157	4·77	32	153	...	...	...	...	...	...
24	...	...	...	6·63	29	193	7·01	16	112	4·83	44	211	...	...	...	...	...	...
25	...	...	...	5·90	37	221	5·45	19	103	...	...	...	...	...	...	...	...	...
26	4·32	45	193	1·43	75	108	...	...	...	...	...	...	...	...	...	...	...	...
27	...	...	...	4·94	25	123	6·20	20	121	4·11	55	227	...	...	...	...	...	...
28	...	...	...	...	...	...	...	...	...	...	...	...	2·05	87	178	...	...	...
29	...	...	...				...	...	...	...	...	...	...	...	...	1·94	41	80
30	...	...	...				2·49	43	108	3·18	38	122	...	...	...	1·08	32	35
31	...	...	...				...	...	...				...	...	...			
Mean	4·69	24	106	5·24	33	149	5·26	25	119	3·69	40	147	2·26	58	127	1·74	50	87
No. of days used	7	7	7	10	10	10	9	9	9	9	9	9	6	6	6	9	9	9

	JULY			AUGUST			SEPTEMBER			OCTOBER			NOVEMBER			DECEMBER		
	F	$\lambda+$	i	F	$\lambda+$	i	F	$\lambda+$	i	F	$\lambda+$	i	F	$\lambda+$	i	F	$\lambda+$	i
1	...	...	...	...	...	...	2·00	91	183	1·48	52	77	...	...	...	3·50	20	70
2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
3	1·18	103	122	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
4	...	...	...	...	...	...	1·93	60	116	...	...	...	...	...	...	...	...	...
5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
6	1·54	94	145	1·24	52	65	...	...	...	...	...	...	3·71	27	100	...	...	...
7	...	...	...	...	...	...	1·54	70	109	...	...	...	...	...	...	3·56	21	72
8	...	...	...	...	...	...	2·09	58	122	2·56	38	96	...	...	...	4·31	17	71
9	1·84	67	123	...	...	...	...	...	...	2·23	37	82	4·81	29	141	...	...	...
10	...	...	...	...	...	...	2·17	34	74	...	...	...	3·97	25	98	...	...	...
11	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3·55	–	–
12	...	...	...	1·67	40	67	...	...	...	2·38	31	73	...	...	...	...	...	...
13	1·61	87	140	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
14	1·56	61	96	2·10	58	123	...	...	...	2·33	38	89	...	...	...	4·62	19	88
15	...	...	...	...	...	...	1·66	39	66	2·87	37	108	...	...	...	4·26	19	82
16	...	...	...	...	...	...	...	...	...	2·26	33	74	...	...	...	...	...	...
17	...	...	...	...	...	...	1·90	75	142	...	...	...	4·34	–	–	4·53	26	118
18	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
19	...	...	...	...	...	...	...	...	...	3·79	38	143	3·20	10	32	...	...	...
20	1·88	36	68	...	...	...	...	...	...	...	...	...	3·17	16	52	...	...	...
21	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	5·39	21	113
22	...	...	...	...	...	...	...	...	...	2·41	34	83	...	...	...	...	...	...
23	1·56	51	80	...	...	...	...	...	...	...	...	...	...	...	...	4·79	15	73
24	1·63	58	95	1·71	73	124	...	...	...	...	...	...	...	...	...	...	...	...
25	...	...	...	1·98	92	183	3·27	27	87	...	...	...	...	...	...	...	...	...
26	...	...	...	...	...	...	...	...	...	...	...	...	6·36	11	72	...	...	...
27	...	...	...	3·49	37	130	...	...	...	...	...	...	7·03	11	79	...	...	...
28	1·42	69	98	1·50	102	153	...	...	...	...	...	...	...	...	...	6·02	14	86
29	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
30	1·85	45	83	...	...	...	3·78	47	178	2·25	27	60	6·45	15	100	2·66	18	49
31	2·74	42	115	2·22	113	252				...	...	...				...	...	...
Mean	1·71	65	106	1·99	71	137	2·26	56	120	2·46	37	89	4·78	18	84	4·29	19	82
No. of days used	11	11	11	8	8	8	9	9	9	10	10	10	9	8	8	11	10	10

Year:				
	Mean	3·38	41	112
	No. of days used	108	106	106

	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE	
	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient
		hr.		hr.		hr.		hr.		hr.		hr.
1	0	...	2	6·1	1	0·1	1	1·1	2	5·7	0	...
2	0	...	2	3·3	0	...	0	...	1	1·0	0	...
3	1	0·1	2	3·5	0	...	1	2·1	0	...	0	...
4	1	2·4	1	1·3	2	7·1	2	7·7	0	...	0	...
5	1	0·9	1	2·3	1	1·4	1	0·5	0	...	0	...
6	0	...	0	...	2	3·5	1	2·3	0	...	0	...
7	1	2·7	0	...	2	4·0	1	1·3	1	0·2	1	0·7
8	1	2·5	0	...	0	...	1	1·9	0	...	0	...
9	1	0·5	2	3·5	0	...	2	9·1	0	...	0	...
10	1	0·9	1	0·9	0	...	0	...	2	6·7	0	...
11	1	0·4	0	...	2	3·7	0	...	1	2·1	1	0·3
12	0	...	0	...	2	3·1	0	...	1	1·6	2	4·3
13	1	0·4	1	0·6	1	0·1	0	...	2	8·5	1	0·3
14	0	...	0	...	2	4·5	0	...	1	0·2	1	0·7
15	1	0·4	0	...	1	0·1	0	...	1	1·0	0	...
16	2	3·7	0	...	2	4·6	0	...	1	1·3	0	...
17	0	...	0	...	1	0·1	0	...	0	...	0	...
18	0	...	0	...	1	1·8	1	1·9	1	1·7	1	0·1
19	1	1·7	0	...	2	5·5	0	...	0	...	1	0·1
20	0	...	1	1·2	0	...	1	0·1	0	...	0	...
21	0	...	1	1·7	0	...	2	3·3	1	0·4	0	...
22	0	...	0	...	2	8·7	0	...	1	1·0	0	...
23	2	10·3	1	0·1	1	0·7	0	...	2	4·3	0	...
24	1	2·5	0	...	1	0·1	0	...	2	3·2	0	...
25	0	...	0	...	1	1·6	0	...	2	6·5	0	...
26	1	0·1	2	8·7	0	...	0	...	2	3·4	0	...
27	1	2·9	1	1·5	0	...	0	...	1	0·6	0	...
28	1	0·5	0	...	0	...	0	...	0	...	0	...
29	2	3·9			1	0·4	0	...	1	1·3	0	...
30	2	8·0			1	0·1	0	...	1	0·6	2	3·5
31	2	4·5			1	0·5			1	0·4		
Total	–	49·3	–	34·7	–	51·7	–	31·3	–	51·7	–	10·0
No. of days used	–	31	–	28	–	31	–	30	–	31	–	30
Mean	–	1·6	–	1·2	–	1·7	–	1·0	–	1·7	–	0·3

	JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER	
	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient
		hr.		hr.		hr.		hr.		hr.		hr.
1	1	0·8	0	...	0	...	0	...	2	4·0	1	2·4
2	1	1·1	1	2·7	1	0·1	1	1·5	0	...	1	1·3
3	1	0·9	2	3·3	1	0·2	1	1·2	2	7·5	1	0·9
4	1	0·3	0	...	0	...	0	...	0	...	0	...
5	0	...	0	...	0	...	2	5·6	2	7·1	1	2·8
6	1	0·8	0	...	0	...	1	1·7	1	2·9	0	...
7	0	...	0	...	0	...	1	1·9	1	1·4	0	...
8	1	0·3	1	0·1	0	...	1	0·6	0	...	1	0·1
9	0	...	1	0·9	0	...	0	...	1	0·1	0	...
10	2	17·5	0	...	0	...	0	...	1	1·1	0	...
11	0	...	1	1·4	0	...	0	...	1	0·5	1	2·7
12	0	...	1	0·1	0	...	0	...	2	5·2	1	1·8
13	1	0·6	0	...	1	0·5	1	0·4	2	5·9	1	0·2
14	1	0·1	0	...	1	0·1	0	...	0	...	2	5·3
15	1	0·2	0	...	1	0·2	1	0·4	0	...	1	2·3
16	1	1·0	2	3·5	0	...	0	...	1	2·3	1	2·7
17	2	7·2	0	...	0	...	0	...	0	...	1	2·4
18	2	7·4	0	...	0	...	0	...	1	0·2	2	4·6
19	1	0·2	1	0·9	0	...	0	...	0	...	1	1·6
20	1	0·1	1	0·7	0	...	2	4·7	1	0·7	0	...
21	0	...	0	...	2	3·2	0	...	1	0·6	1	0·7
22	1	0·1	1	0·5	0	...	0	...	1	1·0	1	1·9
23	0	...	0	...	1	0·8	1	0·6	1	0·7	0	...
24	0	...	0	...	1	0·7	1	1·6	1	0·8	0	...
25	0	...	1	1·2	1	0·4	1	2·8	1	0·8	0	...
26	0	...	2	3·3	0	...	2	8·6	1	2·7	0	...
27	1	2·4	0	...	0	...	1	1·7	1	2·7	1	0·9
28	0	...	0	...	1	2·7	2	3·2	1	0·5	1	1·7
29	0	...	1	1·5	1	2·5	1	1·7	0	...	1	0·1
30	0	...	0	...	1	2·6	2	4·3	0	...	1	0·3
31	0	...	0	...			1	2·2			1	2·0
Total	–	41·0	–	20·1	–	14·0	–	44·7	–	48·7	–	38·7
No. of days used	–	31	–	31	–	30	–	31	–	30	–	31
Mean	–	1·3	–	0·6	–	0·5	–	1·4	–	1·6	–	1·2

Annual values: Character 0 1 2
No. of days used 169 146 50

Duration: Total 435·9
No. of days 365
Mean 1·19 hr.

POTENTIAL GRADIENT (reduced to level surface, Paddock site)

Kelvin electrograph standardized by Wilson readings, underground laboratory
Mean values for periods of sixty minutes between exact hours, G.M.T.

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	JANUARY, factor 4·10				FEBRUARY, factor 4·18				MARCH, factor 4·22			
	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.
	volts per metre											
1	330	640	640	650	705	540	350	-15	100	290	380	530
2	465	505	395	420	-115	365	615	575	255	430	900	470
3	195	135	110	35	165	25	-290	855	785	620	240	140
4	-25	270	405	490	100	-	550	490	90	-50	230	470
5	50	395	380	330	225	215	140	265	330	555	470	215
6	235	305	555	380	75	325	540	340	175	520	580	-100
7	480	665	505	-260	265	400	350	525	-50	140	255	280
8	-60	465	505	455	350	325	465	600	660	850	340	660
9	25	305	210	245	40	475	-90	-300	505	710	455	455
10	305	690	530	1045	250	475	425	300	520	445	580	455
11	690	740	605	50	240	740	665	980	150	-165	340	-25
12	615	785	850	160	640	440	440	Z+	-15	200	390	-75
13	295	220	235	60	175	350	265	515	150	315	430	120
14	245	540	515	825	515	880	540	730	190	545	305	-65
15	625	1060	615	210	475	565	600	815	230	430	305	530
16	-25	320	665	405	525	440	715	475	305	480	280	Z-
17	320	490	555	480	400	375	490	415	90	380	305	410
18	295	445	565	295	190	515	550	600	255	230	305	40
19	615	285	100	260	215	625	805	525	190	405	Z+	175
20	540	715	380	565	415	815	880	550	405	455	140	150
21	605	590	295	320	465	290	440	440	100	365	445	445
22	245	85	465	565	400	375	350	955	265	-330	40	75
23	50	245	-35	305	150	340	625	705	75	670	505	685
24	220	590	885	395	390	600	625	890	365	315	710	545
25	185	270	285	320	375	625	600	540	-40	230	505	215
26	170	195	430	690	-40	350	150	40	150	255	520	150
27	85	405	25	430	50	600	500	440	175	430	605	215
28	330	625	405	580	225	165	300	75	230	520	530	405
29	355	515	-170	405					215	405	200	355
30	445	580	-	Z-					230	215	240	390
31	-220	0	370	540					165	215	215	290
(a)	334	454	446	411	308	453	499	546	263	415	391	364
(b)	275	450	409	388	274	454	467	515	223	351	395	311
Mean	(a) 411		(b) 381		(a) 451		(b) 427		(a) 358		(b) 233	

	APRIL, factor 4·23				MAY, factor 4·18				JUNE, factor 4·17			
	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.
	volts per metre											
1	190	370	230	330	-40	65	190	215	400	365	165	235
2	180	355	215	305	90	50	215	400	250	275	200	200
3	370	430	230	Z+	200	350	125	375	265	400	185	185
4	225	430	90	-660	200	365	125	140	275	485	200	185
5	65	290	Z+	330	150	375	190	215	175	435	225	150
6	205	215	180	Z-	315	450	150	275	175	225	150	225
7	165	315	510	50	225	350	125	240	15	235	150	150
8	215	315	Z±	370	165	400	465	400	215	250	150	185
9	150	-735	Z-	75	275	400	415	415	200	275	150	200
10	140	280	165	455	225	300	240	Z-	175	335	235	325
11	510	570	230	205	150	300	240	275	335	315	215	235
12	290	330	165	215	140	350	490	-350	115	215	435	-150
13	230	380	165	280	-75	25	125	90	115	315	100	185
14	205	165	470	405	90	375	275	325	135	225	85	185
15	265	570	520	535	190	275	140	215	135	165	200	235
16	485	585	315	495	75	300	190	325	125	300	150	185
17	405	507	405	455	275	290	215	350	100	215	165	135
18	100	-75	205	205	215	-125	240	150	215	235	135	100
19	215	315	100	230	190	325	150	225	50	100	125	215
20	65	190	125	305	200	465	140	340	85	150	125	125
21	150	125	180	190	100	340	200	115	165	150	85	100
22	115	165	165	305	140	215	175	315	85	235	175	175
23	65	305	455	315	190	250	115	-125	125	275	125	75
24	165	545	420	290	Z-	275	-50	115	75	315	235	125
25	280	380	355	370	50	90	-350	-250	65	300	235	215
26	205	215	290	305	125	265	-940	525	350	275	115	125
27	230	545	380	330	175	275	190	75	75	225	150	185
28	230	355	315	255	100	165	215	225	215	235	115	165
29	265	395	380	395	165	300	-100	315	135	300	195	125
30	180	430	305	405	215	300	165	225	85	205	110	Z±
31					175	150	100	165				
(a)	220	362	280	311	172	281	208	261	164	268	169	176
(b)	223	352	286	279	154	267	135	214	167	270	172	165
Mean	(a) 293		(b) 285		(a) 231		(b) 193		(a) 194		(b) 193	

The potential gradient is reckoned as positive if the potential increases upwards. For indeterminate potential gradient the following notation is used: Z+, indeterminate, positive value; Z-, indeterminate, negative value; Z±, indeterminate, in magnitude and sign.

(a) Mean of all positive readings.

(b) Mean from all complete days using both positive and negative readings.

POTENTIAL GRADIENT (reduced to level surface, Paddock site)

Kelvin electrograph standardized by Wilson readings, underground laboratory
Mean values for periods of sixty minutes between exact hours, G.M.T.

	JULY, factor 4·18				AUGUST, factor 4·12				SEPTEMBER, factor 4·37			
	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.
	volts per metre											
1	275	470	345	260	125	370	135	110	145	260	195	155
2	235	195	305	315	160	Z±	160	235	65	275	145	290
3	260	290	150	165	175	185	Z±	60	105	130	155	120
4	85	55	110	150	135	320	185	185	185	395	185	300
5	110	205	140	220	210	360	110	125	145	210	195	155
6	205	275	150	220	125	345	125	175	300	405	170	460
7	150	305	165	180	175	260	85	220	80	565	155	260
8	305	330	180	165	200	160	110	150	145	275	210	325
9	260	260	205	165	125	295	150	395	235	250	210	130
10	70	−495	−830	−75	285	160	150	245	105	250	210	145
11	100	250	175	190	185	270	Z±	295	40	155	195	185
12	215	250	115	90	200	310	150	270	40	120	185	210
13	175	250	140	125	185	395	235	295	90	195	170	235
14	90	265	175	290	210	370	150	175	120	195	315	120
15	215	325	165	215	200	235	135	125	170	130	155	290
16	150	165	115	165	50	210	125	125	210	365	185	325
17	65	250	−190	190	175	385	185	245	300	340	210	525
18	275	290	−25	−375	110	370	220	335	290	300	210	325
19	125	240	115	125	75	185	150	210	235	340	145	340
20	100	200	165	290	200	320	150	335	105	105	155	195
21	125	165	165	190	245	220	175	150	120	185	290	0
22	190	200	165	150	210	235	135	555	120	225	260	355
23	150	275	150	215	160	295	100	125	155	325	65	605
24	215	225	150	225	175	260	175	285	210	420	Z+	615
25	165	215	150	165	160	245	200	35	315	290	275	365
26	175	250	115	100	220	320	Z±	370	105	210	430	260
27	−115	325	165	315	125	420	320	435	185	250	210	315
28	340	290	125	215	85	295	175	210	290	355	15	430
29	265	250	150	225	295	470	175	Z±	145	−260	145	640
30	150	375	215	50	125	245	160	245	155	65	380	500
31	90	250	275	290	135	210	210	270				
(a)	178	256	169	195	169	291	162	233	158	253	194	296
(b)	168	232	119	163	162	287	161	232	157	230	194	285
Mean	(a) 199		(b) 172		(a) 214		(b) 211		(a) 225		(b) 217	

	OCTOBER, factor 4·20				NOVEMBER, factor 4·20				DECEMBER, factor 4·20			
	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.
	volts per metre											
1	90	380	165	225	390	380	Z±	40	400	590	340	−25
2	265	505	225	−40	225	755	515	630	200	670	895	465
3	215	365	225	380	−90	−910	455	465	695	590	100	480
4	125	405	240	240	705	880	620	530	330	465	530	655
5	140	275	300	50	440	380	50	Z±	265	Z−	530	190
6	50	415	140	300	−175	430	365	565	150	605	580	415
7	15	365	200	250	75	50	380	705	125	320	340	225
8	65	290	240	390	405	590	300	315	100	540	430	315
9	300	380	225	175	250	880	540	430	190	455	415	365
10	65	165	200	405	380	365	340	275	140	90	250	455
11	140	250	200	530	175	1070	605	780	175	175	380	465
12	290	730	215	480	330	340	465	−75	−15	780	540	530
13	175	405	250	115	−75	90	75	100	115	225	365	340
14	290	300	190	115	340	530	615	505	−115	480	455	240
15	50	315	275	455	350	415	290	340	190	365	465	465
16	140	340	215	315	50	300	340	490	175	225	150	290
17	200	275	330	290	225	330	405	440	115	165	415	430
18	115	175	250	365	100	540	365	190	390	75	455	−555
19	200	290	380	415	125	240	330	465	250	415	480	−355
20	290	330	Z±	15	175	365	340	100	340	705	530	355
21	165	505	355	530	225	265	115	365	100	440	540	165
22	25	365	240	315	−50	555	355	565	−25	100	505	960
23	140	200	200	215	215	465	565	330	770	540	465	515
24	75	355	430	695	40	430	380	225	300	125	480	290
25	380	670	225	415	90	175	225	250	480	755	490	465
26	240	−820	Z±	290	125	440	630	100	150	300	555	490
27	530	530	590	290	−25	515	640	605	505	275	380	240
28	745	−	540	380	480	−10	390	590	225	565	605	175
29	580	530	645	215	440	615	290	265	225	555	300	90
30	240	770	265	−140	125	240	615	530	175	165	300	540
31	25	480	365	390					300	430	530	615
(a)	205	392	287	319	259	451	400	400	271	406	445	401
(b)	182	365	278	299	187	391	413	396	239	406	442	337
Mean	(a) 301		(b) 281		(a) 377		(b) 347		(a) 381		(b) 356	

The factor used for converting the potential at the collector to potential gradient in volts per metre in the open is given for each month.

Annual means				
(a)	225	357	304	326
(b)	202	339	289	299
	(a) 303		(b) 282	

POTENTIAL GRADIENT (reduced to level surface): DIURNAL INEQUALITIES

The departures from the mean of the day are adjusted for non-cyclic change†

184 KEW OBSERVATORY — Selected quiet days — 1942

	Hour G.M.T. 0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Non-cyclic change†	Mean
	volts per metre																									
Jan.	−58	−71	−76	*−128*	−95	−88	−38	+29	+16	+34	+28	+54	+59	+22	+38	+74	+79	*+109*	+96	−18	−47	−14	+29	−37	+76	461
Feb.	−88	−91	−141	*−165*	−161	−134	−41	+21	+28	+21	+65	+65	+14	+17	+76	+103	+73	+5	+61	*+124*	+106	+71	+13	−38	−26	483
Mar.	−68	−67	−89	*−113*	−104	−90	−32	+8	+57	+57	+27	+37	+48	+63	+63	+70	*+77*	+36	+18	+16	−34	+18	+27	−29	−1	411
Apr.	*−75*	−53	−38	−27	−38	+26	+65	*+104*	+64	+22	−19	−21	−15	+1	+10	+7	+8	−8	−8	+17	+45	+8	−20	−54	+12	282
May	*−67*	−63	−56	−52	−22	+56	+129	*+131*	+97	+65	+14	−19	−39	−31	−42	−43	−29	−23	−6	+34	+37	+12	−35	−51	−6	261
June	−30	−3	−25	+2	+29	+39	+91	*+110*	+77	+43	+5	−13	−33	*−39*	−33	−24	−25	*−39*	−33	−29	−15	−11	−21	−25	−21	192
July	−2	−16	−21	−24	−29	+22	*+58*	+54	+46	+45	−1	−8	−21	*−35*	−23	−19	−26	−13	−1	+6	+5	−3	+2	+5	−25	189
Aug.	−47	−42	−34	−11	−17	+35	+79	*+135*	+128	+83	+39	−12	−19	−47	*−50*	−41	−61	−46	−20	−7	−1	−7	−17	−21	+14	198
Sept.	−23	−61	*−67*	−51	−46	−20	+35	+89	*+91*	+61	+2	−13	−45	−42	−41	−44	−33	−12	+32	+59	+66	+46	+26	−9	−24	226
Oct.	−61	−85	*−90*	−82	−63	−44	+24	+74	+67	+29	−9	−34	−46	−57	−13	+10	+22	+85	*+107*	+88	+71	+30	+4	−27	−6	250
Nov.	−23	−50	−95	*−140*	−118	−82	−33	−16	+27	+84	+58	+30	+16	−7	+19	+2	+54	+51	*+92*	+63	+30	+19	+39	−22	···	366
Dec.	−108	−115	*−151*	−148	−133	−119	−54	−21	+15	+43	+98	*+103*	+100	+55	+88	+99	+112	+95	+88	+92	+32	−33	−55	−82	···	372
Year	−54	−61	−74	*−78*	−66	−33	+24	*+60*	+59	+49	+26	+14	+2	−8	+8	+16	+21	+20	+36	+37	+25	+11	0	−33	···	308
Winter	−69	−82	−116	*−145*	−127	−106	−41	+3	+21	+45	+62	+63	+47	+22	+55	+70	+80	+65	*+84*	+65	+30	+11	+7	−45	···	421
Equinox	−57	−66	*−71*	−68	−63	−32	+23	+69	*+70*	+42	0	−8	−14	−9	+9	+11	+18	+25	+37	+45	+37	+25	+9	−30	···	292
Summer	−36	−31	−34	−21	−10	+38	+89	*+107*	+87	+59	+14	−13	−28	*−38*	−37	−32	−35	−30	−15	+1	+6	−2	−18	−23	···	210

Winter: January, February, November, December
Equinox: March, April, September, October
Summer: May to August

† See p. 10. *Observatories' Year Book, 1938.*

AIR POLLUTION: HOURLY MEANS FOR EACH MONTH

185 KEW OBSERVATORY — Complete days only — 1942

	Hour G.M.T. 0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean	No. of days used
	milligrams per cubic metre																									
Jan.	0·12	0·13	*0·10*	0·10	0·12	0·17	0·25	0·33	0·37	0·37	0·37	0·33	0·31	0·29	0·27	0·30	0·33	*0·38*	0·37	0·35	0·29	0·22	0·17	0·15	0·26	31
Feb.	0·08	0·08	0·08	*0·06*	0·07	0·13	0·17	0·20	0·20	0·18	0·18	0·16	0·16	0·17	0·16	0·17	0·21	0·27	*0·27*	0·25	0·22	0·15	0·11	0·09	0·16	28
Mar.	0·15	0·15	*0·13*	0·14	0·15	0·17	0·25	*0·34*	0·27	0·25	0·22	0·21	0·20	0·20	0·22	0·23	0·25	0·30	0·32	0·30	0·27	0·21	0·18	0·16	0·22	31
Apr.	*0·03*	*0·03*	0·04	0·05	0·06	0·09	0·12	*0·13*	0·11	0·09	0·07	0·06	0·05	0·06	0·07	0·07	0·09	0·09	0·09	0·08	0·07	0·06	0·06	0·04	0·07	30
May	*0·02*	0·03	0·03	0·04	0·05	0·07	*0·08*	0·07	0·07	0·04	0·03	0·03	0·02	0·03	0·03	0·03	0·04	0·04	0·05	0·04	0·05	0·04	0·03	0·03	0·04	31
June	0·05	0·05	0·06	0·08	0·08	0·09	*0·11*	0·09	0·07	0·04	0·03	0·03	0·03	0·03	0·03	0·03	*0·02*	0·02	0·02	0·03	0·02	0·03	0·04	0·05	0·05	30
July	0·03	0·03	0·04	0·05	*0·07*	0·07	0·06	0·05	0·03	0·02	0·03	0·03	0·03	0·03	0·03	*0·02*	*0·02*	0·03	0·03	0·03	0·03	0·03	0·03	0·03	0·03	31
Aug.	0·03	0·03	0·03	0·04	0·05	0·07	*0·08*	0·07	0·05	0·04	0·02	0·01	0·01	0·01	*0·00*	0·01	0·01	0·01	0·02	0·02	0·02	0·02	0·02	0·02	0·03	30
Sept.	0·05	0·05	0·07	0·07	0·06	0·08	0·09	*0·11*	0·10	0·11	0·05	0·05	0·05	0·05	*0·04*	0·05	0·06	0·09	0·10	0·11	0·10	0·08	0·06	0·05	0·07	29
Oct.	0·10	0·10	0·10	*0·08*	0·10	0·11	0·15	*0·21*	0·19	0·19	0·16	0·10	0·10	0·11	0·12	0·13	0·16	0·16	0·15	0·16	9·16	0·13	0·12	0·10	0·13	31
Nov.	0·23	0·20	*0·20*	0·20	0·21	0·23	0·31	0·40	0·48	0·49	0·43	0·38	0·37	0·36	0·33	0·38	0·44	0·50	0·49	*0·50*	0·44	0·38	0·29	0·27	0·35	30
Dec.	0·11	0·09	*0·07*	0·07	0·08	0·14	0·21	0·26	0·31	*0·36*	0·33	0·30	0·29	0·26	0·28	0·30	0·32	0·31	0·33	0·31	0·25	0·20	0·17	0·14	0·23	31
Year	0·08	0·08	*0·08*	0·08	0·09	0·12	0·16	*0·19*	0·19	0·18	0·16	0·14	0·13	0·13	0·13	0·14	0·16	0·18	0·19	0·18	0·16	0·13	0·11	0·09	0·14	363
Winter	0·13	0·13	0·11	*0·11*	0·12	0·17	0·23	0·30	0·34	0·35	0·33	0·29	0·28	0·27	0·26	0·29	0·33	*0·37*	0·37	0·35	0·30	0·24	0·19	0·16	0·25	120
Spring	0·09	0·09	*0·09*	0·09	0·11	0·13	0·19	*0·23*	0·19	0·17	0·15	0·13	0·13	0·13	0·15	0·15	0·17	0·19	0·21	0·19	0·17	0·13	0·12	0·10	0·15	61
Autumn	*0·07*	0·07	0·09	0·07	0·08	0·09	0·12	*0·16*	0·15	0·15	0·11	0·07	0·07	0·08	0·08	0·09	0·11	0·13	0·13	0·13	0·13	0·11	0·09	0·07	0·10	60
Summer	0·03	0·03	0·04	0·05	0·06	0·07	*0·08*	0·07	0·05	0·03	0·03	0·03	0·02	0·03	0·02	0·02	*0·02*	0·03	0·03	0·03	0·03	0·03	0·03	0·03	0·04	122